

MISSION BAY

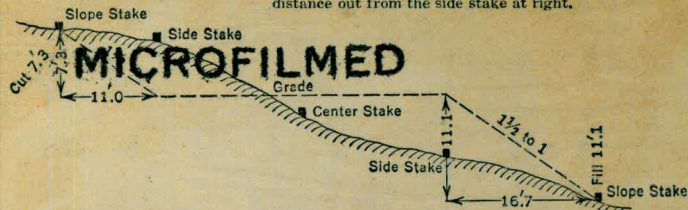
33

1877

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1 1/2 to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Book # 33

Cut or Fill	Distance out from Side or Shoulder Stake										Cut or Fill
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

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FINAL?

3-1-48

X-SECTIONS OF "CENTER" ISLAND PATERA GROUP

PX

PROJ- #3-1

STA- 119+00

0+00 = PT. 500' WEST OF STA-119+00 PATERA B/L

DIST	+	H.I.	-	ELEV
	88	6		
WATER LEVEL	8.67	10.57		(1.9)

TIDE AT

11:10

E-33 5.7 4.9

0+00 5.0 5.6

W-0+50 4.3 6.3

W-0+95 3.5 7.1

W-1+40 3.6 7.0

W-1+83 4.3 6.3

W-2+35 5.8 4.8

STA - 120+00

0+00 = PT. 500' W/STA-120+00 PATERA B/L

PX

DIST	+	H.I.	-	ELEV
WATER LEVEL	9.65	11.55		(1.9)

TIDE AT
11:32
11:23

W-2+80 8.3 3.3

W-2+30 7.3
~~8.3~~ 4.3

W-1+83 6.4 5.2

W-1+32 5.7 5.9

W-0+85 4.7 6.9

W-0+45 5.0 6.6

0+00 5.0 —

E-0+45 5.6 6.0

E-0+93 6.5 5.1

E-1+50 8.7 2.9

3-1-78

3-1-78

(2)

STA-121+00

STA-122+00

PX
0+00=PT. 500' W/STA-121+00 PATERA B/L

0+00=PT. 500' W/STA-122+00 PATERA B/L

DIST	+	H.I.	-	ELEV	TIDE AT	DIST	+	H.I.	-	ELEV.	TIDE AT
WATER LEVEL	190 9.45	12.0 11.95		(2.5)	12:40	WATER	230 10.45	13.0 12.95		(2.5)	12:55
E-1+76			9.2	2.8		W-2+10			8.3	4.7	
E-1+28			6.8	5.2		W-1+30			6.9	6.1	
E-0+70			5.9	6.1		W-0+90			5.7	7.3	
0+00			5.1	6.9		0+00			5.1	7.9	
W-0+60			5.3	6.7		E-0+55			6.1	6.9	
W-1+15			6.2	5.8		E-1+10			6.7	6.3	
W-1+90			7.2	4.8		E-1+55			7.9	5.1	
W-2+75			8.3	3.7		E-1+95			9.9	3.6	
0+00=PT. 180' EAST	SOUND	EAST	(320' W/B/L)			0+00=PT. 200' EAST	SOUND	EAST	(300' W/B/L)		
DIST	SOUND		DIST	SOUND		DIST	SOUND		DIST	SOUND	
0+00	0.2	+2.7	0+90	7.5	-4.6	0+25	0.0	+2.9	1+10	7.6	-4.7
13:45						19:55					
+10	0.5	+2.4	1+00	8.3	-5.4	+30	0.3	+2.6	20	7.6	
(2.9) 20	1.9	+1.9	(2.9) 10	9.0	-6.1	(2.9) 40	1.1	+1.8	(2.9) 30	7.9	-5.0
30	2.1	+0.8	20	8.9	-6.0	50	1.8	+1.1	40	7.8	-4.9
40	3.2	-0.3	30	8.9	-5.8	60	2.5	+0.4	50	7.5	-4.6
50	4.9	-2.0	40	8.2	-5.3	70	3.5	-0.6	60	7.2	-4.3
60	6.0	-3.1	50	7.8	-4.9	80	5.2	-2.3	70	6.5	-3.6
70	6.7	-3.8	60	7.5	-4.6	90	6.5	-3.6	80	5.9	-2.5
80	7.1	-4.2	70	7.3	-4.4	1+00	7.3	-4.4	90	5.0	-0.1
			80	6.0	-3.1	2+00	2.0		2+00	2.0	+0.9

3-1-48

STA- 123+00

0+00=PT. 500' W/STA-123+00 PATERA B/L

DIST	+	H.I.	-	ELEV	TIDE AT
WATER LEVEL	11.25	13.85		(2.6)	13:00
E-2+38			11.0	2.9	
E-2+15			9.9	4.0	
E-2+57			8.9	5.0	
E-0+95			6.4	7.5	
E-0+40			5.8	8.1	
E-0+00			5.1	8.8	
W-0+42			5.2	8.7	
W-1+10			7.1	6.8	
W-2+80			8.5	5.4	
W-2+70			10.0	3.9	

0+00=PT. 270' EAST SOUND EAST (260' W/B/L)

DIST	SOUND	DIST	SOUND
0+00	0.2 +2.7	0+70	8.0 -5.1
1+00	+1.5 +1.4	(2.9) 80	8.0 —
(2.9) 20	3.0 -0.1	90	8.0 —
30	5.4 -2.5	1+00	8.0 —
40	6.8 -3.9	20	7.9 -5.0
50	7.5 -4.6	1+30	7.5 -4.6
60	8.1 -5.2	40	7.0 -4.1

3-1-48

STA- 124+00

0+00=PT. 500' W/STA-124+00 PATERA B/L

DIST	+	H.I.	-	ELEV	TIDE AT
WATER LEVEL	10.81	12.51		(2.7)	13:18
W-3+38			10.6	1.9	
W-2+75			9.9	2.6	
W-2+05			8.8	3.7	
W-1+32			7.5	5.0	
W-0+53			5.8	6.7	
0+00			5.0	7.5	
E-0+51			3.2	7.3	
E-1+15			6.3	6.2	
E-1+60			8.3	4.2	
E-2+32			10.8	1.7	

0+00=PT. 230' EAST SOUND EAST (270' W-B/L)

DIST	SOUND	DIST	SOUND
0+00	0.6 +2.4	0+70	7.9 -4.9
1+00	+1.7 +1.6	(3.0) 80	8.0 -5.0
20	1.4 +1.6	90	8.4 -5.4
30	3.0 -0.0	1+00	8.4 —
40	7.8 -1.8	10	8.5 -5.5
50	6.0 -3.0	20	8.5 —
0+60	7.5 -4.5	30	8.2 -5.2
		40	8.0 -5.0
		1+50	6.7 -3.7

SOUNDINGS OF APPROACH CHANNEL SECTION "A"

DIST SOUND

DIST SOUND

PX

PROJ- 3-1

3+20 10.0 -7.6

PX

STA- 14+00

5.0 -2.6

14+00=STA-14+00 SECT. "A" B/L: SECT. AT 90° TO B/L:

(2.4)

1.0 +1.4

DIST SOUND

DIST SOUND

50

10:00

0+00 1.4 +1.0 1+60 10.6 -8.2

+10 1.5 +0.9 (2.4) 10.5 -8.1

09:55 1.5 — 10.7 -8.3

(2.4) 1.6 +0.8 10.6 -8.2

1.6 — 2+00 10.7 -8.3

50 1.7 +0.7 11.0 -8.4

1.7 — 11.9 -9.5

1.6 +0.8 11.2 -8.8

1.5 +0.9 11.0 -8.6

5.0 -2.6 50 10.8 -8.4

1+00 9.2 -6.8 10.7 -8.3

10.7 -8.3 10.6 -8.2

10.5 -8.1 10.6 —

10.4 -8.0 10.3 -7.9

10.8 -8.4 3+00 10.3 —

1+50 11.0 -8.6 3+10 10.3 —

3-7-48

PX STA- 13+00

0+00=STA-13+00 SECT. "A" E/4. SOUND SOUTH AT 90° TO E/2.

DIST	SOUND		DIST	SOUND	
0+00	1.1	+1.2	1+80	10.0	-7.7
+10	1.0	+1.3		10.0	—
<u>10:07</u>	1.0	—	2+00	10.0	—
(2.3)	1.0	—	(2.3)	12.1	-9.8
	1.2	+1.1		10.1	
				11.5	-9.2
50	1.2	—		12.5	
	1.3	+1.0		11.3	-9.0
	1.5	+0.8	50	11.0	-8.7
	1.8	+0.5		11.0	—
	6.5	-4.2		11.0	—
1+00	9.7	-7.4		11.0	—
	9.9	-7.6		10.8	-8.5
	10.0	-7.7	3+00	10.5	-8.2
	10.0	—		10.7	-8.4
	10.0	—		11.2	-8.9
	10.0	—		8.8	-6.5
50	10.0	—		1.0	+1.3
<u>10:10</u>	10.0	—	<u>10:03</u>	0.9	+1.4
1+70	10.0	—	3+50	0.8	+1.5

STA- 13+00

3-7-48

DIST SOUND

PX SOUND

(5)

3+60 0.8 +1.5

STA- 11+00

3-9-98

(6)

0+00=STA-11+00 SECT. "A" B/L: SOUND SOUTH AT 90° TO B/L.

STA- 12+00

0+00=STA-12+00 SECT. "A" B/L: SOUND SOUTH AT 90° TO B/L.

DIST	SOUND		DIST	SOUND	
0+00	1.2	+1.0	1+80	9.9	-7.7
+10	1.2	—		9.9	—
<u>10:19</u>	1.1	+1.1	2+00	9.9	—
(2.2)	1.0	+1.2		11.3	-9.1
	1.0	—		11.3	—
50	1.2	+1.0		11.1	-8.9
	1.1	+1.1		10.8	-8.6
	1.1	—	50	10.6	-8.4
	1.1	—	(2.2)	10.4	-8.2
	6.5	-4.3	(2.1)	10.4	-8.3
1+00	9.8	-7.6		10.1	-8.0
	9.8	—		10.0	-7.9
	9.9	-7.7	3+00	9.8	-7.7
	9.9	—		9.8	—
	9.9	—		8.0	-5.9
50	9.9	—		1.2	+0.9
	9.9	—	<u>10:27</u>	0.9	+1.2
1+20	9.9	—	3+50	0.5	+1.6

DIST	SOUND		DIST	SOUND	
0+00	1.8	+0.3	1+90	9.2	-7.1
+10	1.9	+0.2	2+00	9.3	-7.2
<u>10:30</u>	1.8	+0.3		9.9	-7.3
(2.1)	1.6	+0.5	<u>10:33</u>	10.5	-8.4
	1.6	—	(2.1)	10.5	—
50	1.7	+0.4		10.3	-8.2
	1.6	+0.5	50	10.0	-7.9
	1.7	+0.4		10.0	—
	1.8	+0.3		10.0	—
	1.9	+0.2		10.0	—
1+00	8.8	-6.7		10.0	—
	9.9	-7.8	3+00	10.1	-8.0
	9.9	—		10.3	-8.2
	9.8	-7.7		7.0	-4.9
	9.7	-7.6		1.0	+1.1
50	9.6	-7.5		0.7	+1.4
	9.5	-7.4	50	2.8	
	9.4	-7.3	<u>10:35</u>	2.8	
1+80	9.2	-7.1		2.8	

STA-10+00

3-7-18

STA-9+00

3-7-18

0+00=STA-10+00 SECT. "A" B/L: SOUND SOUTH AT 90° T. B/L.

0+00=STA-9+00 SECT. "A" B/L: SOUND SOUTH AT 90° T. B/L. (7)

	DIST	SOUND		DIST	SOUND		DIST	SOUND		DIST	SOUND		DIST	SOUND
0+00	1.8	+0.2	1+30	9.0	-7.0	0+00	1.4	+0.4	1+30	9.5	-7.7			
+10	1.8	—	2+00	8.6	-6.6	+10	1.4	—	2+00	9.1	-7.3			
<u>10:41</u>	1.9	+0.1		8.8	-6.8	<u>10:53</u>	1.6	+0.2		9.1	—			
(2.0)	1.9	—		11.2	-9.2	(1.8)	1.8	0.0	(1.8)	9.8	-8.0			
	1.9	—		11.0	-9.0		1.9	-0.1		9.9	-8.1			
50	2.0	0.0		10.3	-8.3	50	2.0	-0.2		9.9	—			
	1.9	+0.1	50	10.2	-8.2		2.2	-0.4	50	9.8	-8.0			
	1.9	—	(2.0)	10.1	-8.1		2.2	—		9.7	-7.9			
	1.7	+0.3	(1.9)	10.0	-8.1		2.2	—		9.6	-7.8			
	2.0	0.0		10.2	-8.3		2.5	-0.7		9.6	—			
1+00	6.4	-4.4		10.3	-8.4	1+00	9.0	-7.2		9.6	—			
08	9.4	-7.4	3+00	10.3	—		9.7	-7.9	3+00	9.1	-7.3			
88	9.8	-7.8		10.1	-8.5		9.8	-8.0		9.5	-7.7			
87	9.7	-7.7		8.7	-6.8	<u>10:55</u>	10.1	-8.3		5.5	-3.7			
117	9.6	-7.6		0.9	+1.0		10.1	—	30	0.9	+0.9			
50	9.5	-7.5		0.8	+1.1	50	10.0	-8.2	<u>10:58</u>					
	9.5	—	50	0.5	+1.4		9.9	-8.1						
	9.3	-7.3	<u>10:47</u>				9.8	-8.0						
1+80	9.2	-7.2	3+70			1+80	9.8	—						

STA-8+00

3-9-48

STA-7+00

3-9-48

⑧

0+00=STA-8+00 SECT. "A" B/L: SOUND SOUTH AT 90° To B/L

0+00=STA-7+00 SECT. "A" B/L: SOUND SOUTH AT 90° To B/L

DIST

SOUND

DIST

SOUND

DIST

SOUND

DIST

SOUND

0+00

1.1

+0.6

1+90

10.1

-8.4

0+00

0.2

+1.4

1+90

9.9

-8.3

+10

1.2

+0.5

2+00

9.8

-8.1

+10

0.1

+1.5

2+00

9.9

—

11:04

1.4

+0.3

11:05

9.7

-8.0

11:13

0.1

+1.2

10.0

-8.4

(1.7)

1.5

+0.2

(1.7)

9.5

-7.8

(1.6)

0.5

+1.1

(1.6)

11.2

-9.6

1.5

—

10.3

-8.6

0.6

+1.0

11.1

-9.5

50

1.5

—

10.3

—

50

0.7

+0.9

10.8

-9.2

1.6

+0.1

50

9.9

-8.2

0.7

—

50

10.3

-8.7

1.9

-0.2

9.9

—

0.8

+0.8

10.0

-8.4

2.3

-0.6

9.6

-7.9

1.3

+0.3

10.0

—

4.8

-3.1

9.6

—

6.0

-4.4

11:1711:18

9.7

-8.1

1+00

9.3

-7.6

9.5

-7.8

1+00

9.5

-7.9

9.6

-8.0

10.0

-8.3

3+00

9.1

-7.4

10.2

-8.6

3+00

9.6

—

10.1

-8.4

9.3

-7.6

10.2

—

9.6

—

10.4

-8.7

8.0

-6.3

10.0

-8.4

8.7

-7.1

10.5

-8.8

2.0

-0.3

10.0

—

1.0

+0.6

50

10.5

—

3+40

0.5

+1.2

50

9.9

-8.3

3+40

0.5

+1.1

10.7

-9.0

11:08

9.9

—

50

10.9

-8.7

9.9

—

1+80

10.2

-8.5

1+80

9.9

STA- 6+00

3-7-48

0+00= STA- 6+00 SECT. "A" B/L: SOUND SOUTH AT 90° T. B/L.

	DIST.	SOUND	DIST	SOUND
0+00	1.7	+ ?	1+90	9.5 -8.0
+10	0.2	+1.3	2+00	9.5 —
11:25	0.6	+0.9		9.5 —
(1.5)	0.6	—		10.9 -8.9
	0.6	—		10.9 —
50	1.3	+0.2	(1.5)	10.0 -8.5
	1.1	+0.4	(1.7) 50	10.2 -8.8
	1.1	—	11:30	10.0 -8.6
	1.5	0.0		10.0 —
	3.7	-2.2		10.1 -8.7
1+00	9.0	-7.5		11.0 -9.6
	9.7	-7.9	3+00	10.7 -9.3
	9.7	—		10.7 —
	9.5	-8.0		8.7 -7.3
	9.5	—		2.0 -0.6
50	9.4	-7.9		1.8 -0.4
	9.4	—	50	1.7 -0.3
	9.2	-7.7		2.0 -0.6
1+80	9.7	-7.9	3+70	2.1 -0.7

STA- 5+00

3-7-48

0+00= STA- 5+00 SECT. "A" B/L: SOUND SOUTH AT 90° T. B/L.

	DIST	SOUND	DIST	SOUND
0+00	0.4	+1.0	1+90	10.1 -8.7
+10	1.1	+0.3	2+00	10.2 -8.8
11:37	1.5	—		10.2 —
	0.5	-0.1		10.2 —
(1.9)	1.7	-0.3	(1.7)	10.8 -9.4
	1.7	—		11.7 -10.0
50	1.5	-0.1		10.8 -9.4
	1.5	—	50	10.5 -9.1
	1.1	+0.3		10.8 -9.4
	1.1	—		10.8 —
	1.1	—		10.5 -9.1
1+00	2.3	-5.9		10.7 -9.3
	9.7	-8.3	3+00	10.5 -9.1
	9.5	-8.1		9.7 -8.3
	9.5	—		2.5 -6.1
	9.4	-8.0		3.0 -1.6
50	9.4	—		3.1 -1.7
	9.8	-8.4	50	3.4 -2.0
	10.0	-8.6		3.7 -2.3
1+80	10.0	—		4.0 -2.6
			A+00	3.9 -2.5
				3.9 -2.5
				3.9 -2.5

STA- 4+00

3-1-48

0+00=STA-4+00 SECT. 'A' 8/4: SOUND SOUTH AT 90° 7.8/4

STA-3+00

3-1-48

(10)

DIST SOUND

DIST SOUND

0+00=STA-3+00 SECT 'A' 8/4: SOUND SOUTH.

DIST SOUND

DIST SOUND

0+00 1.1 +0.2 1+30 10.3 -9.0

0+00 1.2 -0.5 1+80 9.0 -8.3

+10 1.3 0.0 2+00 10.1 -8.8

+10 1.5 -0.8 8.8 -8.1

11:12

1.2 +0.1 10.1 —

13:00

(1.3) 1.0 +0.3 (1.3) 9.8 -8.5

1.9 -1.2 2+00 9.1 -8.4

1.0 — 10.1 -8.8

(0.7) 1.9 — (0.7) 9.2 -8.5

50 1.0 — 11:51 9.8 -8.5

1.8 -1.1 9.7 -9.0

1.1 +0.2 50 9.5 -8.2

50 1.8 — 11.1 -10.4

1.1 — 9.7 -8.4

1.6 -0.9 10.8 -10.1

1.7 -0.4 9.5 -8.2

1.5 -0.8 50 10.0 -9.3

2.5 -1.2 9.3 -8.0

1.1 -0.4 9.4 -8.7

1+00 9.1 -7.8 9.0 -7.7

3.1 -2.4 9.0 -8.3

10.2 -8.9 3+00 9.0 —

1+00 7.5 -6.8 9.6 -8.9

10.4 -9.1 9.1 -7.8

3.1 -8.4 (1.7) 9.2 -8.5

10.3 -9.0 7.7 -6.1

9.0 -8.3 3+00 9.4 -8.7

10.2 -8.9 2.0 -0.7

9.2 -8.5 8.8 -8.1

50 10.2 — 3+40 0.5 +0.8

9.0 -8.3 8.5 -7.8

10.1 -8.8

50 8.9 -8.2 13:05 4.0 -3.3

10.0 -8.7

8.8 -8.1 3+36 0.0 +0.7

1+80 10.4 -9.1

1+70 9.0 -8.3 3+40 +0.8 +1.5

STA-2+00

ORIGINAL

3-1-18

②

0+00-STA-2+00 SECT "A" B/L: SOUND SOUTH.

BOUNDINGS OF APPROACH CHANNEL SECT. "B" - STA.

DIST	SOUND		DIST	SOUND	
0+00	0.6	+0.1	1+90	9.7	-9.0
+10	0.3	+0.4	2+00	9.6	-8.9
<u>13:10</u>	0.2	+0.5		9.5	-8.8
	0.9	-0.2		9.5	—
(0.7)	0.3	+0.4	(0.7)	10.2	-9.5
50	0.0	+0.7		10.0	-9.3
	+0.1	+0.8	50	9.7	-9.0
	0.4	+0.3		9.0	-8.3
	0.5	+0.2		8.7	-8.0
	2.0	-1.3		9.0	-8.3
1+00	8.8	-8.1		8.8	-8.1
	9.5	-8.8	3+00	8.5	-7.8
	9.5	—		9.0	-8.3
	10.0	-9.3		8.0	-7.3
	10.0	—	3+29	0.0	+0.7
50	9.6	-8.9	30	+0.9	+1.6
	10.0	-9.3			
	10.1	-9.4			
1+80	9.8	-9.1			

PROJ. # 3-1

STA - (-6+00)

2+00-STA-6+00 SECT. "B" B/L: SOUND EAST.

DIST	SOUND		DIST	SOUND	
0+00	+0.5	+1.2	1+60	16.0	-15.3
+10	2.0	-1.3		15.7	-15.0
<u>14:00</u>	5.0	-4.3	(0.7)	16.2	-15.5
	7.3	-6.6		16.6	-15.9
(0.7)	8.0	-7.3	2+00	16.8	-16.1
50	8.9	-8.2		12.0	-16.3
	9.8	-9.1		16.8	-16.1
	11.5	-10.8		16.5	-15.8
	12.5	-11.8		15.9	-15.2
	13.0	-12.3	50	15.4	-14.7
1+00	14.4	-13.7		14.0	-13.3
	15.0	-14.3		12.5	-11.8
	15.0	—		12.0	-11.3
	15.0	—		11.1	-10.4
	15.3	-14.6	3+00	10.4	-9.7
1+50	15.1	-14.4	3+10	9.8	-9.1

STA (-6+00)

4-7-98

DIST	SOUND	DIST	SOUND
3+20	8.6	-7.9	
	2.9	-6.7	
(0.7)	5.0	-4.3	
5.0	0.5	+0.2	
3+55	0.0	+0.7	

STA (-5+00)

3-4-98

(12)

0+00=STA -5+00 SECT. 8" B/L: SOUND EAST AT 90° TO B/L.

DIST	SOUND	DIST	SOUND
14.15	0.0	+0.8	2+90 16.2 -15.4
20	0.3	+0.5	3+00 15.8 -15.0
17.25	5.0	-4.2	15.5 -14.7
(0.8)	12.0	-11.2	(0.8) 15.0 -14.2
50	14.2	-13.4	14.8 -14.0
	19.0	-13.2	14.1 -13.3
	13.7	-12.9	50 13.4 -12.6
	11.5	-13.7	13.0 -12.2
	18.2	-14.4	12.9 -11.9
2+00	15.8	-15.0	12.4 -11.6
	16.2	-15.4	11.4 -10.6
	16.5	-15.7	4+00 10.8 -10.0
	16.4	-15.6	10.0 -9.2
	16.4	—	9.1 -8.3
50	16.4	—	7.2 -6.4
	16.4	—	7.5 -3.7
	16.4	—	50 0.5 +0.3
2+80	16.4	—	4+55 0.0 +0.8

FINAL

BARRAGAN
SHERRY
STANLEY3-8-18
GOOD
LIGHT WIND
CLEAR

STA- 67+00

3-8-18

(13)

SOUNDINGS OF APPROACH CHANNEL SECTION "D"

DIST SOUND

DIST SOUND

PROJ #3-1

3+20 12.0 -7.4

PX

STA- 67+00

9.5 +0.1

0+00=STA-67+00 SECT. "D" 8/4: SOUND SOUTH AT 90° TO 8/4

(4.6) 9.2 +0.4

DIST SOUND DIST SOUND

50 9.2 —

0+00 9.4 +0.2 1+60 13.6 -9.0

4.3 +0.3

+10 9.9 — 13.9 -8.8

4.1 +0.5

10:30

10:35 9.9 — 13.4 —

4.0 +0.6

(4.6) 9.3 +0.3 (4.6) 13.9 —

4.0 —

9.3 — 2+00 13.9 —

4+00 4.0 —

50 9.9 +0.2 13.5 -8.9

10:39

9.9 — 13.3 -8.7

9.9 — 13.3 —

9.9 — 13.3 —

5.7 -1.1 50 13.3 —

1+00 9.0 -4.4 13.5 -8.9

13.0 -8.4 13.6 -9.0

13.1 -8.5 13.5 -8.9

13.0 -8.4 13.1 -8.5

13.5 -8.9 3+00 13.0 -8.4

1+50 13.9 -8.8 3+10 13.0 —

STA- 68+00

3-8-48

0+00=STA-68+00 SECT. "D" 3/4. SOUND SOUTH AT 90° TO 3/4.

DIST SOUND

DIST	SOUND	DIST	SOUND
0+00	4.0 +0.4	1+90	12.8 -8.4
+10	4.1 +0.3	2+00	12.8 —
10:45	4.2 +0.2	10:48	12.8 —
(4.4)	4.0 +0.4	(4.4)	12.8 —
	4.0 —		13.0 -8.6
50	4.1 +0.3		13.0 —
	4.5 -0.1	50	13.0 —
	4.0 +0.4		13.1 -8.7
	4.2 +0.2		13.1 —
	4.8 -0.4		13.1 —
1+00	10.2 -5.8		13.1 —
	12.5 -8.1	3+00	13.2 -8.8
	13.0 -8.6		13.2 —
	13.0 —		11.8 -7.4
	13.1 -8.7		4.5 -0.1
50	13.0 -8.6		4.1 +0.3
	12.8 -8.4	50	4.1 —
	12.7 -8.3		4.1 —
1+80	12.8 -8.4	3+70	4.7 -0.3

STA- 68+00

3-8-48

DIST SOUND

DIST	SOUND
3+80	4.1 +0.3
(4.4)	4.0 +0.4
4+00	4.0 —

DIST SOUND

(74)

STA 69+00

3-8-48

STA- 70+00

3-8-48

(15)

STA-69+00 SECT. "D" B/L: SOUND SOUTH AT 90° To B/L						STA-70+00 SECT. "D" B/L: SOUND SOUTH AT 90° To B/L					
DIST	SOUND		DIST	SOUND		DIST	SOUND		DIST	SOUND	
0+00	3.5	+0.8	2+00	13.2	-8.9	0+00	3.0	+1.1	2+00	13.0	-8.9
+10	3.5	—		13.2	—		3.0	—	11:08	13.0	—
10:54	3.6	+0.7	(4.3)	13.3	-9.0	11:05	3.0	—		13.0	—
(4.3)	3.6	—		13.1	-8.8	(4.1)	3.2	+0.9	(4.1)	13.0	—
	3.6	—		13.2	-8.9		3.1	+1.0		13.1	-9.0
50	3.6	—	50	13.2	—	50	3.2	+0.9	50	13.1	—
	4.0	+0.3	10:57	13.2	—		3.2	—		13.2	-9.1
	4.1	+0.2		13.2	—		3.3	+0.8		13.2	—
	4.0	+0.3		13.3	-9.0		3.2	+0.9		13.2	—
	4.3	0.0		13.3	—		4.1	0.0		13.2	—
.1+00	12.2	-7.9	3+00	13.3	—	1+00	11.1	-7.0	3+00	13.2	—
	13.3	-9.0		13.3	—		12.8	-8.7		13.2	—
	12.5	-9.2		12.0	-7.7		13.0	-8.9		13.0	-8.9
	12.8	-9.5		5.0	-0.7		13.0	—		4.3	-0.2
	12.5	-9.2		4.2	+0.1		13.0	—		4.2	-0.1
50	13.5	—	50	4.0	+0.3	50	13.0	—	50	4.0	+0.1
	13.5	—		4.0	—		13.0	—		3.9	+0.2
				4.1	+0.2					4.0	+0.1
	13.3	-9.0		4.0	+0.3		13.0	—	11:10	4.0	—
	13.3	—	11:00	4.0	—		13.0	—		3.9	+0.2
1+90	13.1	-8.8	4+00	4.0	—	1+90	13.0	—	4+00	3.8	+0.3

STA- 71+00

3-8-18

STA- 72+00

3-8-18

0+00= STA-71+00 SECT. "D" B/L: SOUND SOUTH 90° To B/L

0+00= STA-72+00 SECT. "D" B/L: SOUND SOUTH AT 90° To B/L

DIST			SOUND			DIST			SOUND		
0+00	2.4	+ 1.6	2+00	12.7	-8.7	0+00	2.0	+ 1.8	2+00	12.0	- 8.2
+10	2.5	+ 1.5		12.7	—	+10	2.0	—		12.0	—
<u>11:15</u>	2.7	+ 1.3		12.8	-8.8	<u>11:15</u>	2.0	—		12.0	—
(4.0)	2.8	+ 1.2	(4.0)	12.8	—	(3.8)	2.1	+ 1.7	(3.8)	11.8	- 8.0
	2.9	+ 1.1		12.8	—		2.3	+ 1.5		12.0	- 8.2
50	2.8	+ 1.2	50	12.9	-8.9	50	2.3	—	50	12.5	- 8.7
	2.9	+ 1.1		12.9	—		2.4	+ 1.4		12.8	- 9.0
	2.9	—		13.0	-9.0		2.5	+ 1.3		12.8	—
	3.0	+ 1.0		13.0	—		2.5	—		12.9	- 9.1
	2.1	- 3.1		13.0	—		1.8	- 1.0		13.0	- 9.2
1+00	11.8	- 7.8	3+00	12.8	-8.8	1+00	12.0	- 8.2	3+00	13.0	—
	13.0	- 9.0		12.8	—		12.9	- 9.1		13.0	—
	13.0	—		9.7	-5.7		13.0	- 9.2		10.7	- 6.9
	13.0	—		4.5	-0.5		13.0	—		3.7	+ 0.1
	13.0	—		4.0	0.0		13.0	—		3.5	+ 0.3
50	12.8	- 8.8	50	3.8	+ 0.2	50	13.0	—	50	3.5	—
	12.8	—	<u>11:20</u>	3.7	+ 0.3		12.8	- 9.0		3.5	—
		—		3.7	—					3.7	+ 0.1
	12.8	—		3.7	—		12.6	- 8.8		3.7	—
	12.8	—		3.8	+ 0.2		12.9	- 8.6	<u>11:31</u>	3.7	—
1+90	12.8	—	4+00	3.8	—	1+90	12.2	- 8.4	4+00	3.7	—

STA- 73+00

3-8-18

0+00 = STA-73+00 SECT. "D" B/L: SOUND SOUTH 90° To B/L.

DIST	SOUND		DIST	SOUND	
0+00	1.7	+1.9	2+00	12.9	-9.3
+10	1.7	—		12.8	-9.2
11:36	1.7	—		12.9	-9.3
(3.6)	1.7	—	(3.6)	12.9	—
	1.8	+1.8		12.8	-9.2
50	1.9	+1.7	50	12.9	-9.3
	2.0	+1.6		13.0	-9.4
	2.3	+1.3		13.0	—
	2.1	+1.5		13.1	-9.5
	3.2	+0.4		13.1	—
1+00	2.0	-5.4	3+00	13.1	—
	13.0	-9.4		13.2	-9.6
	13.0	—		11.0	-7.4
	12.8	-9.2		4.1	-0.5
	12.9	-9.3		3.9	-0.3
50	13.1	-9.5	50	3.7	-0.1
	12.8	-9.2		3.6	0.0
	12.8	—		3.6	—
	12.8	—		3.6	—
	12.8	—	11:42	3.6	—
1+90	12.8	—	4+00	3.6	—

STA- 74+00

3-8-18

0+00 = STA-74+00 SECT. "D" B/L: SOUND SOUTH 90° To B/L.

DIST	SOUND		DIST	SOUND	
0+00	1.3	+2.2	2+00	11.1	-7.6
+10	1.3	—		11.1	—
11:46	1.4	+2.1		11.1	—
	1.4	—		11.1	—
(3.5)	1.5	+2.0	(3.5)	11.0	-7.5
50	1.6	+1.9	50	11.0	—
	1.7	+1.8		10.9	-7.4
	1.9	+1.6		11.5	-8.0
	2.0	+1.5		12.1	-8.6
	3.5	0.0		12.0	-8.5
1+00	2.1	-5.6	3+00	12.1	-8.6
	12.9	-8.9		12.1	—
	12.1	-8.6		11.6	-8.1
	12.0	-8.5		5.8	-2.3
	11.8	-8.3		4.0	-0.5
50	11.3	-7.8	50	3.9	-0.4
	11.0	-7.5		3.5	0.0
	11.2	-7.7		3.8	-0.3
	12.0	-8.5		3.7	-0.2
	11.8	-8.3	11:51	3.5	0.0
1+90	11.8	-8.3	4+00	3.5	—

(17)

FINAL

7-8-48

SOUNDINGS CHANNEL SECTION "A" PROJ # 3-1

PX
STA- 0+90

0+00=STA-0+90 SECT. "A" B/L: SOUND SOUTH // TO BRIDGE.

DIST	SOUND	DIST	SOUND
0+17.5	4.5	-3.2	
0+52.5	5.0	-3.7	
0+87.5	5.0	—	
1+05.	9.0	-7.7	
1+22.5	14.8	-13.5	
1+57.5	15.0	-13.7	
1+92.5	17.5	-16.2	
2+27.5	15.2	-13.9	
2+62.5	13.1	-11.8	
2+97.5	14.7	-13.4	
3+15	8.0	-6.7	
3+32.5	2.5	-1.2	
3+67.5	0.4	+0.9	

19:50

(1.3)

25:00

FINAL

BARRIGAN
SHERRY
STANLEY7-10-48
CLEAR
LIGHT WIND
WARM

(18)

SOUNDINGS OF CHANNEL SECTION "D" PROJ # 3-1

STA- 75+00

0+00=STA-75+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L.

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	3.1	+2.6	1+70	13.5	-7.8
+10	3.1	—		13.4	-7.7
09:33	3.3	+2.4	(5.7)	13.4	—
(5.7)	3.7	—	2+00	13.4	—
	3.4	+2.3		13.2	-7.5
50	3.5	+2.2		13.2	—
	3.5	—		13.5	-7.8
	3.8	+1.9		13.1	-7.7
	4.1	+1.6	50	13.3	-7.6
	3.5	-3.8		13.3	—
1+00	13.7	-8.0		13.4	-7.7
	14.1	-8.4		13.7	-8.0
	14.0	-8.3		14.0	-8.3
	14.0	—	3+00	14.0	—
	14.0	—		14.0	—
50	13.5	-7.8		13.7	-8.0
1+60	13.3	-7.6	3+30	11.0	-5.3

STA-75+00

3-10-48

DIST. SOUND DIST. SOUND

DIST.	SOUND	DIST.	SOUND
3+10	6.1 -0.4		
50	5.6 +0.1		
(5.7)	5.5 +0.2		
	5.5 —		
	5.9 -0.2		
	5.8 -0.1		
4+00	6.0 -0.3		

63:40

STA-76+00

3-10-48

(19)

0+00=STA-76+00 SECT. D' 3/4. SOUND SOUTH AT 90° TO B/L.

DIST	SOUND	DIST	SOUND
0+00	3.0 +2.7	2+00	14.2 -8.5
+10	3.3 +2.4		13.8 -8.1
08:13	3.0 +2.7	(5.7)	13.8 —
(5.7)	3.0 —		14.1 -8.4
	3.2 +2.5		14.2 -8.5
50	3.5 +2.2	50	14.4 -8.7
	3.5 —		14.1 -8.4
	7.8 +0.9		14.0 -8.3
	7.7 +1.0		14.1 -8.4
	5.5 +0.2		14.0 -8.3
1+00	12.0 -6.3	3+00	14.0 —
	13.7 -8.0		14.0 —
	14.1		
	14.1 -8.4		13.7 -8.0
	14.1 —		5.8 -0.1
	14.1 —		5.6 +0.1
50	14.1 —	50	5.6 —
	14.1 —		5.8 -0.1
			5.8 —
	14.0 -8.3		5.9 -0.2
	14.0 —		5.9 —
1+90	14.0 —	09:50	5.9 —
		4+00	6.0 -0.3

STA-77+00

3-10-18

0+00=STA-77+00 SECT. "D" B/L: SOUND SOUTH AT 90° To B/L.

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	2.8 +2.8	2+00	14.0 -8.4		
+10	2.8 —		14.0 —		
<u>10:03</u>	3.1 +2.5	(5.6)	14.4 -8.8		
(5.6)	3.4 +2.2		14.4 —		
	3.0 +2.6		14.4 —		
50	3.0 —	50	14.3 -8.7		
	3.1 +2.5		14.1 -8.5		
	3.8 +1.8		14.0 -8.4		
	3.8 —		14.0 —		
	6.7 -1.1		14.0 —		
1+00	13.0 -7.4	3+00	14.0 —		
	14.5 -8.9		13.5 -7.9		
	14.5 —		11.7 -6.1		
	14.5 —		5.8 -0.2		
	14.3 -8.7		5.5 +0.1		
50	14.3 —	50	6.0 -0.4		
	14.4 -8.8		5.8 -0.2		
			5.9 -0.3		
			5.9 —		
	14.4 —		6.0 -0.4		
1+90	14.4 —	<u>10:08</u>	6.0 —		

STA-78+00

3-10-18

0+00=STA-78+00 SECT. "D" B/L: SOUND SOUTH AT 90° To B/L.

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	3.9 +1.6	2+00	13.8 -8.3		
+10	3.8 +1.7		13.5 -8.0		
<u>10:14</u>	3.0 +2.5		13.8 -8.3		
(5.5)	3.0 —	(5.5)	13.9 -8.4		
	3.0 —		14.1 -8.6		
50	3.1 +2.4	50	14.0 -8.5		
	3.6 +1.9		13.9 -8.4		
	3.6 —		14.2 -8.7		
	4.0 +1.5		13.8 -8.3		
	6.1 -0.6		14.0 -8.5		
1+00	12.5 -7.0	3+00	14.0 —		
	14.4 -8.9		14.0 —		
	14.2 -8.7		13.1 -7.6		
	14.1 -8.6		6.0 -0.5		
	14.0 -8.5		5.8 -0.3		
50	14.0 —	50	5.8 —		
	14.0 —		5.8 —		
			5.7 -0.2		
	14.2 -8.7		5.6 -0.1		
	14.2 —	<u>10:20</u>	5.6 —		
1+90	14.1 -8.6	4+00	5.7 -0.2		

(20)

FINAL

3-10-78

SOUNDINGS OF BORROW AREA SOUTH OF AND ADJOINING

APPROACH CHANNEL SECT. "C" PROJ. # 3-1

STA - 41+40

0+00 = STA. (41+40) = (# 3W-40) SECT. "D" 8/4. SOUND SOUTH 90° 7.8/4

DIST	SOUND	DIST	SOUND
2+00	18.8 -13.6	3+60	20.5 -15.3
+10	19.5 -14.3		20.5 —
<u>10:49</u>	19.5 —		20.3 -15.1
(5.2)	19.7 -14.5	(5.2)	20.2 -15.0
	21.0 -15.8	4+00	20.4 -15.2
50	20.5 -15.3		20.6 -15.4
	21.3 -16.1		20.5 -15.3
	21.4 -16.2		20.2 -15.0
	21.4 —	<u>10:53</u>	22.0 -16.8
	21.2 -16.0	50	22.5 -17.3
3+00	21.2 —		22.5 —
	21.2 —		22.3 -17.1
	21.0 -15.8		22.1 -16.9
	21.0 —		21.7 -16.5
	20.7 -15.5	5+00	21.0 -15.8
3+50	20.5 -15.3	5+10	20.0 -14.8

STA - 41+40.

3-10-78

(21)

DIST	SOUND	DIST	SOUND
5+20	19.5 -14.3		
	19.5 —		
	19.9 -14.2		
50	19.4 —		
	19.8 -14.6		
	20.0 -14.8		
(5.2)	20.4 -15.2		
(5.1)	20.4 -15.3		
6+00	20.0 -14.9		
<u>10:55</u>	15.3 -10.2		
	15.8 -10.7		
	14.0 -8.9		
	5.2 -0.1		
50	4.8 +0.3		
	4.9 +0.2		
	4.9 —		
	5.1 0.0		
	5.2 -0.1		
7+00	5.2 -0.1		
<u>10:57</u>			

3-10-78

END SECTION 560' SOUTH OF STA-90+70 SECT. "D" B/L.

0+00 = PX 560'S/STA-90+70 SECT. "D" B/L: SOUND EAST

DIST	SOUND	DIST	SOUND
0+00	9.5 +0.1	1+80	20.2 -15.6
+10	9.1 +0.5		19.7 -15.1
	9.2 +0.4	2+00	19.0 -14.4
(4.6) ⁺⁵	13.0 -8.4	(4.6)	19.0 —
	17.5 -12.9		19.1 -14.5
50	19.5 -14.9		19.0 -14.4
	19.6 -15.0	11:28	19.3 -14.7
70	19.6 —	50	19.3 —
	19.5 -14.9		19.5 -14.9
11:25	19.5 —		19.5 —
1+00	19.7 -15.1		19.6 -15.0
	20.2 -15.6		19.6 —
	20.6 -16.0	3+00	20.0 -15.4
	20.8 -16.2		
	21.1 -16.5		
50	21.5 -16.9		
	21.8 -17.2		
1+70	20.5 -15.9		

FINAK

3-10-78

SOUNDINGS OF CHANNEL SECTION "B" PROJ. #3-1

0+00 = STA. (-1+00) SECT. "B" B/L: SOUND EAST AT 90° T. B/L.

DIST	SOUND	DIST	SOUND
0+00	1.0 +1.9	2+00	11.0 -8.1
+10	0.8 +2.1		11.2 -8.3
13:30	0.7 +2.2		11.6 -8.7
(2.9)	0.8 +2.1	(2.9)	13.0 -10.1
	0.7 +2.2		12.8 -9.9
50	0.8 +2.1	50	12.7 -9.8
	0.7 +2.2		12.7 —
	1.0 +1.9		12.7 —
	1.0 —		12.5 -9.6
	4.5 -1.6		12.3 -9.4
1+00	9.0 -6.1	3+00	11.8 -8.9
	9.7 -6.8		10.7 -7.8
	9.5 -6.6		7.0 -4.1
	9.5 -6.6		5.3 -2.4
	9.7 -6.8		5.3 —
50	10.0 -7.1	50	2.2 +0.7
	10.3 -7.4	60	3.8 -0.9
	10.3 —	70	3.9 -0.5
	10.4 -7.5	80	3.3 -0.4
1+90	10.7 -7.8	90	3.5 -0.6
		1+00	3.5 —

13:37

STA-(-2+00)

3-10-18

0+00 STA-(-2+00) SECT. "B" B/L SOUND EAST AT 90° To B/L

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	0.6 +2.1	2+00	11.5 -8.8		
710	0.5 +2.2		11.8 -9.1		
13:45	0.5 —		12.5 -9.8		
(2.7)	0.5 —	(2.7)	12.0 -9.3		
	0.5 —		12.0 —		
50	0.5 —	50	11.5 -8.8		
	0.6 +2.1		11.5 —		
	0.5 +2.2	13:48	11.5 —		
	0.5 —		11.3 -8.6		
	4.9 -2.2		11.2 -8.5		
1400	10.0 -7.3	3+00	11.0 -8.3		
	11.0 -8.3		10.1 -7.4		
	11.4 -8.7		7.0 -4.3		
	10.5 -7.8		4.8 -2.1		
	10.8 -8.1		4.4 -1.7		
50	11.0 -8.3	50	4.1 -1.4		
	11.0 —		4.4 -1.7		
	11.1 -8.4		4.8 -2.1		
	11.3 -8.6		5.5 -2.8		
	11.6 -8.9	13:50	6.3 -3.6		
1490	11.6 -8.9	4+00	8.5 -5.8		

STA-(-3+00)

3-10-18

0+00 STA-(-3+00) SECT. "B" B/L SOUND EAST AT 90° To B/L

(23)

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	1.0 +1.5	2+00	11.7 -9.2		
710	0.8 +1.7		12.0 -9.5		
13:57	0.7 +1.8		11.8 -9.3		
(2.5)	0.7 —	(2.5)	12.2 -9.7		
	0.6 +1.9		12.0 -9.5		
50	0.6 —	50	11.7 -9.2		
	0.5 +2.0		11.7 —		
	0.5 —		11.4 -8.9		
	0.5 —		11.4 —		
	0.5 —		11.0 -8.5		
1400	5.5 -3.0	3+00	10.7 -8.2		
	10.2 -7.7		10.7 —		
	10.0 -7.5		9.5 -7.0		
	10.0 —		10.0 -7.5		
	10.1 -7.6		10.4 -7.9		
50	10.4 -7.9	50	10.8 -8.3		
	11.0 -8.5		11.6 -9.1		
	11.0 —		12.3 -9.8		
	11.1 -8.6		12.3 —		
	11.4 -8.9	14:01	13.0 -10.5		
1490	11.4 -8.9	4+00	13.4 -10.9		

STA. (-4+00) 3-10-18
 0+00=STA. (-4+00) SECT. "B" B/L: SOUND EAST AT 90° To B/L.

DIST	SOUND	DIST	SOUND
0+00	0.3 +2.1	2+00	11.0 -8.6
+10	0.4 +2.0		10.8 -8.4
<u>14:07</u>	0.5 +1.9		11.1 -8.7
(2.4)	0.5 —	(2.4)	11.3 -8.9
	0.5 —		11.2 -8.8
50	0.5 —	50	14.4 -12.0
	0.4 +2.0		15.0 -12.6
	0.5 +1.9		15.0 —
	0.5 —		14.7 -12.3
	0.5 —		15.6 -13.2
1+00	6.5 -4.1	3+00	15.5 -13.1
	9.6 -7.2		15.4 -13.0
<u>14:10</u>	9.5 -7.1		15.4 —
	9.2 -7.3		15.2 -12.8
	10.8 -8.4		15.2 —
50	10.5 -8.1	50	15.2 —
	10.6 -8.2		15.5 -13.1
	10.6 —		15.8 -13.4
	11.0 -8.6		15.7 -13.3
	—		15.8 -13.4
1+90	11.0 —	4+00	15.2 -12.8

STA. (-5+00) 3-10-18 (27)
 0+00=STA. (-5+00) SECT. "B" B/L: SOUND EAST AT 90° To B/L.

DIST	SOUND	DIST	SOUND
0+00	0.2 +2.0	2+00	17.0 -14.8
+10	0.1 +2.1		17.5 -15.3
	0.1 —		17.9 -15.7
(2.2)	0.1 —	(2.2)	18.0 -15.8
	0.1 —		18.0 —
50	0.1 —	50	18.0 —
	0.1 —		18.0 —
	0.1 —		18.0 —
	0.2 +2.0		18.0 —
	1.4 +0.8		17.5 -15.3
1+00	7.5 -5.3	3+00	17.1 -14.9
	10.0 -7.8		16.7 -14.5
<u>14:22</u>	11.9 -9.7		16.4 -14.2
	12.3 -10.1		16.0 -13.8
	13.1 -10.9		15.2 -13.0
50	14.1 -11.9	50	14.8 -12.6
	14.0 -11.8		14.7 -12.5
	14.0 —		14.4 -12.2
	15.1 -12.9		13.0 -10.8
1+90	15.2 -13.0	4+00	12.5 -10.3

STA. (-6+00)

3-10-18

(25)

0+00=STA. (-6+00) SECT. "B" 3/4: SOUND EAST AT 90° T. B/L.

DIST	SOUND		DIST	SOUND	
0+00	1.1	+0.7	2+00	18.0	-15.9
+10	5.5	-3.4		18.3	-16.2
	5.6	-3.5		18.0	-15.9
(2.1)	7.8	-5.7	(2.1)	17.1	-15.0
	9.2	-7.1		17.5	-15.4
50	9.5	-7.4	50	16.0	-13.9
	11.0	-8.9		14.7	-12.6
<u>14:33</u>	12.5	-10.4		13.2	-11.1
	15.9	-13.8		13.0	-10.9
	14.2	-12.1		12.5	-10.4
1+00	15.3	-13.2	3+00	11.0	-8.9
	16.0	-13.9	<u>14:38</u>		
	16.8	-14.1			
	17.4	-15.3			
	17.0	-14.9			
	16.0				
50	17.4	-15.3			
	17.7	-15.6			
	17.6	-15.5			
<u>14:35</u>	17.5	-15.4			
1+90	17.8	-15.7			

FINAL

3-22-78

STA-88+00

3-22-78

(26)

SOUNDINGS OF APPROACH CHANNEL SECTION "D"

DIST SOUND DIST SOUND

PROJ # 3-1

3+20 11.0 -5.9

STA-88+00

5.5 -0.4

0+00=STA-88+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L.

(5.1) 5.0 +0.1

DIST. SOUND DIST SOUND

50 5.8 -0.7

0+00 0.1 +5.0 1+60 14.8 -9.7

5.5 -0.4

+10 0.5 +4.6 15.1 -10.0

5.3 -0.2

10:10

1.2 +3.9 (5.1) 15.1 —

5.1 0.0

(5.1) 2.4 +2.7 15.0 -9.9

5.2 -0.1

3.5 +1.6 2+00 15.0 —

4+00 5.2 —

50 6.1 -1.0 15.0 —

10:18

8.2 -3.1 15.2 -10.1

9.4 -4.3 15.2 —

10:43

10.5 -5.4 15.2 —

11.6 -6.5 50 15.1 -10.0

1+00 12.4 -7.3 14.8 -9.7

13.0 -7.9 14.7 -9.3

14.0 -8.9 14.5 -9.4

14.5 -9.4 14.8 -9.7

14.5 — 3+00 14.8 —

1+50 14.7 -9.6 3+10 14.9 -9.8

STA- 87+00

3-22-18

STA- 86+00

3-22-18

(27)

0+00=STA-87+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L.

0+00=STA-86+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L.

DIST			SOUND			DIST			SOUND			
0+00	0.3	+4.6	2+00	14.6	-9.7	0+00	0.3	+4.4	2+00	13.5	-8.8	
+10	0.6	+4.3		14.6	—	+10	0.6	+4.1	(4.9)	13.5	—	
10:23	1.1	+3.8	(4.9)	14.4	-9.5	10:32	0.9	+3.8	10:41	13.5	-8.9	
(4.9)	2.4	+2.5		14.2	-9.3	(4.7)	2.0	+2.7	(4.6)	13.5	—	
	4.4	+0.5		14.0	-9.1		3.6	+1.1		13.7	-9.1	
50	7.0	-2.1	50	14.0	—	50	5.4	-0.7	50	13.5	-8.9	
	8.6	-3.7		14.0	—		6.2	-1.5		13.5	—	
	8.6	—		14.0	—		7.0	-2.3		14.0	-9.4	
	10.0	-5.1		14.8	-9.9		7.9	-3.2		14.0	—	
	10.8	-5.9		15.2	-10.3		9.0	-4.3		14.2	-9.6	
1+00	11.3	-6.4	3+00	15.2	—	1+00	9.0	—	3+00	14.4	-9.8	
	12.2	-7.3	10:28	15.0	-10.1		10.1	-5.4		14.0	-9.4	
	14.0	-9.1		12.1	-7.2		13.5	-8.8		7.0	-2.4	
	14.4	-9.5		6.0	-1.1		13.6	-8.9		5.5	-0.9	
10:25	14.0	-9.1		5.5	-0.6		13.6	—		5.0	-0.4	
50	14.2	-9.3	50	5.1	-0.2	50	13.7	-9.0	50	5.1	-0.5	
	14.1	-9.2	60	5.1	—		13.6	-8.9	60	4.8	-0.2	
			70	5.2	-0.3				70	4.8	—	
	14.3	-9.4	80	5.2	—		13.5	-8.8	80	5.2	-0.6	
	14.4	-9.5	10:31	90	5.5	-0.6		13.2	-8.5	90	5.0	-0.4
1+90	14.5	-9.6	4+00	5.6	-0.7	1+90	13.4	-8.7	4+00	5.0	—	
									10:50			

STA- 85+00

3-22-78

0+00=STA-85+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L

DIST	SOUND	DIST	SOUND
0+00	0.4 +4.0	2+00	14.0 -9.7
+10	0.9 +3.5		13.8 -9.5
<u>11:01</u>	1.0 +3.4	(4.3)	13.7 -9.4
(4.4)	1.8 +2.6		13.4 -9.1
	2.6 +1.8		13.4 —
50	4.5 -0.1	50	13.4 —
	6.6 -2.2		13.4 —
	7.2 -2.8		13.8 -9.5
	8.5 -4.1		14.0 -9.7
	9.5 -5.1	<u>11:08</u>	14.0 —
1+00	11.6 -7.2	3+00	14.0 —
	12.8 -8.4		14.0 —
	13.0 -8.6		14.0 —
	13.5 -9.1		8.5 -4.2
	13.6 -9.2		5.0 -0.7
50	13.6 —	50	4.6 -0.3
(4.7)	—	60	4.5 -0.2
<u>11:05</u>	13.6 —	70	4.8 -0.5
(4.3)	13.8 -9.5	80	4.8 —
	13.8 —	90	4.8 —
1+90	17.5 -10.2	1+00	4.6 -0.3
		<u>11:10</u>	

STA- 84+00

3-22-78

0+00=STA-84+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L

DIST	SOUND	DIST	SOUND
0+00	0.0 +4.1	2+00	13.1 -9.0
+10	0.3 +3.8		13.0 -8.9
<u>11:18</u>	1.0 +3.1		13.0 —
(4.1)	1.9 +2.2	(4.1)	13.0 —
	3.0 +1.1		12.8 -8.7
50	4.1 0.0	50	12.8 —
	5.0 -0.9		13.1 -9.0
	5.3 -1.2		13.4 -9.3
	5.7 -1.6		13.4 —
	7.1 -3.0		13.8 -9.7
1+00	7.8 -3.7	3+00	13.8 —
	9.1 -5.3		13.8 —
	11.5 -7.4		11.7 -7.6
	13.2 -9.1		6.3 -2.2
	13.4 -9.3		4.6 -0.5
50	13.4 —	50	4.5 -0.4
		60	4.4 -0.3
<u>11:20</u>	13.1 -9.0	70	4.3 -0.2
		80	4.7 -0.3
	13.3 -9.2		—
	13.1 -9.0	<u>11:29</u>	9.4 —
1+90	13.1 —	7+00	4.6 -0.5

(28)

STA. 83+00

3-22-98

0+00 = STA. 83+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L

DIST	SOUND		DIST	SOUND	
0+00	+0.2	+4.1	2+00	12.2	-8.3
+10	0.1	+3.8		12.5	-8.6
<u>11:30</u>	0.5	+3.4		12.0	-8.1
(3.9)	2.0	+1.9	(3.9)	12.0	—
			<u>11:35</u>	11.9	-8.0
50	3.0	+0.9	50	11.8	-8.0
	2.3	-3.4	(3.8)	12.2	-8.4
	8.5	-4.6		13.4	-9.6
	8.5	—		13.2	-9.4
	9.0	-5.1		13.4	-9.6
1+00	10.7	-6.8	3+00	13.4	—
	11.8	-7.9		13.4	—
	13.5	-9.6		11.0	-7.2
	13.7	-9.8		4.8	-1.0
	13.6	-9.7		4.3	-0.5
50	13.1	-9.2	50	4.3	—
			60	4.7	-0.9
	12.7	-8.8	70	4.4	-0.6
	12.2	-8.3	80	4.7	—
	12.1	-8.2	90	4.3	-0.5
1+90	12.2	-8.3	4+00	4.3	—
			<u>11:37</u>		

STA. 82+00

3-22-98

0+00 = STA. 82+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO B/L

DIST	SOUND		DIST	SOUND	
0+00	0.0	+2.5	2+00	11.0	-8.5
+10	0.7	+1.8		11.0	—
<u>12:51</u>	1.3	+1.2		10.7	-8.2
(2.5)	1.5	+1.0	(2.5)	10.7	—
	1.7	+0.8		10.5	-8.0
50	1.8	+0.7	50	10.7	-8.2
	1.8	—		10.9	-8.4
	1.9	+0.6		10.9	—
	2.4	+0.1		10.9	—
	4.0	-1.5		10.9	—
1+00	10.5	-8.0	3+00	10.9	—
	11.1	-8.6		11.0	-8.5
	11.3	-8.8		9.4	-6.9
	11.3	—		9.1	-1.6
	11.3	—		2.8	-0.3
50	11.2	-8.7	50	3.2	-0.7
			60	3.1	-0.6
	11.4	-8.9	70	3.0	-0.5
			80	3.0	—
	11.4	—	90	3.0	—
	11.0	-8.5	1+00	3.3	-0.8
1+90	11.0	—	<u>12:52</u>		

(29)

STA- 81+00

3-22-78

0+00=STA-81+00 SECT. "D" B/L. SOUND SOUTH AT 90° T. B/L.

	DIST	SOUND	DIST	SOUND	
	0+00	0.9	+1.4	2+00	11.0 -8.7
	10	0.7	+1.6		11.0 —
13:09		0.5	+1.8		10.7 -8.1
(2.3)		0.5	—	(2.3)	10.2 -7.9
		0.5	—		10.2 —
50		0.5	—	50	10.2 —
		1.1	+1.2		10.7 -8.1
		0.9	+1.4		10.4 —
		1.1	+1.2		10.3 -8.0
		1.5	+0.8		10.3 —
1+00		5.0	-2.7	3+00	10.7 —
		10.3	-8.0		10.8 -8.5
		11.0	-8.7		10.1 -7.8
		10.8	-8.5		7.0 -4.7
13:11		10.8	—		7.0 -1.7
50		10.8	—	50	2.8 -0.5
				60	3.0 -0.7
		11.0	-8.7	70	2.8 -0.5
				80	3.1 -0.8
		11.0	—	90	3.2 -0.9
		11.0	—	4+00	3.2 —
1+30		11.0	—	13:15	

BARRAGAN
SHERPS
STANLEY

3-26-78

CLEAR
COOL

STRONG WIND

(30)

ORIGINAL SOUNDINGS OF
PROJECT # 9
SECTION "ABC"

STA-171100

3-26-48

0700 = STA-171100 "ABC" B/k. SOUND SOUTH AT 90° TO B/k.

DIST	SOUND	DIST	SOUND
0700	2.0 +2.9	1790	2.9 +2.5
+10	2.5 +2.4	2700	2.9 —
<u>11:00</u>	3.0 +1.9		2.4 —
(4.9)	3.1 +1.8	(4.9)	2.4 —
	2.8 +2.1		2.4 —
50	2.8 —		2.4 —
	2.4 +2.5	50	2.4 —
	2.1 +2.8		2.4 —
	2.4 +2.5		2.4 —
	2.4 —		2.4 —
1700	2.3 +2.6		2.4 —
	2.3 —	3700	2.2 +2.7
	2.4 +2.5		2.2 —
	2.4 —		2.2 —
	2.4 —		2.2 —
50	2.5 +2.4		2.2 —
	2.5 —	50	2.1 +2.8
	2.5 —	<u>11:05</u>	2.1 —
			2.2 +2.7
1780	2.5 —	3780	3.7 +1.2

STA-171700

3-26-48

DIST	SOUND	DIST	SOUND
3790	7.1 -2.2	6700	12.5 -7.5
4700	10.2 -5.3		12.6 -7.6
	11.8 -6.9	(5.0)	12.7 -7.7
(4.9)	11.8 —		12.8 -7.8
	11.5 -6.6		12.8 —
	11.4 -6.5	50	12.7 -7.7
50	11.4 —		12.5 -7.5
	11.3 -6.4		12.4 -7.4
	12.1 -7.2		12.2 -7.2
<u>11:07</u>	12.4 -7.5		12.1 -7.1
	12.3 -7.4	7700	12.1 —
	12.8		—
5700	12.8 -7.9		12.1 —
	13.0 -8.1		12.1 —
	13.1 -8.2		12.1 —
	12.8 -7.9		12.0 -7.0
	12.7 -7.8	50	11.8 -6.8
50	12.7 —		11.2 -6.2
(5.9)	12.5 -7.6		10.0 -5.0
		<u>11:12</u>	9.3 -4.3
(5.0)	12.4 -7.4		8.8 -3.8
	12.5 -7.5		8.2 -3.2
		1.5	7.4 -2.4
		3.0	7.0 -2.0
5790	12.5 —	2.0	7.0 -2.0
		6.1	6.1 -1.1

FINAL

4-1-48

BARRAGAN
SHERRY
STANLEY4-1-48
CLEAR
CALM
WARM

32

X-SECTIONS OF "CENTER" ISLAND PATERA

GROUP - PROJECT # 3-1

Sta. 126+00

PX - STA - 125+00

0+00 = PT. 500' WEST OF 125+00 PATERA B/L.

0+00 = PT. 500' WEST OF STA-125+00 PATERA B/L.

DIST	+	H.I.	-	ELEV	Water Level	10.45	13.05	10.45	2.6
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Tide at
9:20TIDE AT
9:15

WATER LEVEL	10.8	13.40	10.80	2.6	W 3+88			10.5	2.6
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E 2+50			10.8	2.6	W 3+15			9.7	3.4
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E 2+00			8.9	4.5	W 2+55			8.7	4.4
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E 1+40			7.3	6.1	W 1+90			7.2	5.9
--------	--	--	-----	-----	--------	--	--	-----	-----

E 0+95			5.9	7.5	W 1+40			5.4	7.7
--------	--	--	-----	-----	--------	--	--	-----	-----

E 0+55			5.2	8.2	W 0+98			3.7	9.4
--------	--	--	-----	-----	--------	--	--	-----	-----

0+00			4.8	8.6	W 0+47			3.3	9.8
------	--	--	-----	-----	--------	--	--	-----	-----

W 0+50			3.3	10.1	0+00			4.8	8.3
--------	--	--	-----	------	------	--	--	-----	-----

W 0+97			5.4	8.0	E 0+70			5.4	7.7
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W 1+60			7.0	6.4	E 1+35			7.1	6.0
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W 2+33			8.5	4.9	E 2+20			9.1	4.0
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W 3+70			10.7	2.7	state E 2+50			10.5	2.6
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4-1-48

Sta 127+00

0+00 = P.T. 500' West of Sta 125+00 Paterna

Dist	+	H.I.	-	Elev	Tide at 9:45
Water Level	9.6	12.0	9.60	(2.4)	
E 2+60			9.6	2.4	
E 2+18			9.6	2.4	
E 1+75			7.4	4.6	
E 1+23			6.3	5.7	
E 0+62			5.0	7.0	
0+00			4.8	7.2	
W 0+50			3.6	8.4	
W 1+20			4.3	7.7	
W 1+95			6.7	5.3	
W 2+80			8.7	3.3	
W 3+90			9.8	2.2	

4-1-48

(33)

Sta 128+00

0+00 = P.T. 500' West of Paterna

Dist	+	H.I.	-	Elev	Tide at 9:55
Water Level	8.72	11.0	8.72	(2.3)	
W 3+40			8.7	2.3	
W 2+60			7.8	3.2	
W 2+00			7.1	3.9	
W 1+40			6.2	4.8	
W 0+70			5.4	5.6	
0+00			5.0	6.0	
E 0+45			4.3	6.7	
E 0+82			4.5	6.5	
E 1+25			6.3	4.7	
E 2+20			7.6	3.4	
E 2+52			8.7	2.3	

4-1-48

4-1-48

(39)

Sta. 129+00

Sta. 130+00

D 0+00 = PT 500' West of Paterno B/L

0+00 = PT 500' West of Paterno B/L

Dist	+	H.L.	-	Elev
Water Level	9.1	11.3		(2.2)

Tide at
10:07

Dist	+	H1	-	Elev
Water Level	8.9	10.5		(2.1)

Tide at
10:16E-2+17 9.1
~~7.3~~ 2.2

E-2+30 8.4 2.1

E-1+70 7.3 4.0

W-1+65 7.6 2.9

E-1+10 6.0 5.3

W-1+04 7.3 3.2

E-0+46 4.3 7.0

W-0+55 6.3 4.2

0+00 4.8 6.5

0+00 5.1 5.4

W-0+29 6.8 4.5

E-0+17 4.9 6.1

W-1+12 7.0 4.3

E-0+96 4.5 6.0

W-1+70 7.8 3.5

E-1+65 6.4 4.1

W-2+48 8.6 2.7

E-2+17 7.8 2.7

E-2+30 8.5 2.0

4-1-48

4-1-48

(35)

STA- 131+00

STA- 132+00

0+00 = PT. 500' WEST OF STA-131+00 PATER B/L.

0+00 = PT. 490' WEST OF STA-132+00 PATER B/L.

DIST	+	H.I.	-	ELEV
WATER LEVEL	6.8	8.9		(2.1)

TIDE AT
10:20

DIST	+	H.I.	-	ELEV
WATER LEVEL	6.9	8.9		(2.0)

TIDE AT
10:32

E-2+39			6.8	2.1
E-1+64			4.8	4.1
E-1+11			2.9	6.0
E-0+63			3.1	5.8
0+00			4.9	4.0
W-0+51			6.1	2.8
W-1+00			6.4	2.5
W-				

W-0+77			6.9	2.0
0+00			5.0	3.9
E-0+60			4.8	4.1
E-1+35			6.4	2.5
E-1+50			6.7	2.2

X-SECTIONS OF NORTH EAST ISLAND PATERA

0+00=PT. 300' EAST STA-132+00 PATERA B/L

GROUP - PROJECT - 3 - 1

DIST + H.I. - ELEV

STA - 133+00

E-4+00 11.3 7.4 3.9

0+00=PT. 50' EAST OF PATERA B/L.

E-2+80 6.5 4.8

DIST + H.I. - ELEV

E-1+50 6.2 5.1

WATER

TIDE AT

LEVEL 6.9 8.2

(1.3)

12:42

E-0+61 5.8 5.5

W-0+99

6.9 1.3

0+00 5.3 6.0

0+00

5.0 3.2

W-0+88 5.1 6.2

E-0+70

4.8 3.4

W-1+89 6.2 5.1

E-1+66

3.9 4.3

W-3+00 8.2 3.1

E-2+70

3.4 4.8

W-3+80 10.0 1.3

E-3+95

4.3 3.9

WATER

LEVEL 10.0 (1.3)

TIDE AT

13:04

E-5+20

4.3 3.9

E-6+35

4.8 3.4

E-7+50

5.3 2.9

STA-131+00

7-1-48

STA-130+00

7-1-48

(37)

0+00 = PT. 260' EAST OF STA-131+00 PATERA B/L

0+00 = PT. 250' EAST OF STA-130+00 PATERA B/L

	DIST	+	H.I.	-	ELEV	TIDE AT
WEST -		11.9	13.2		(1.3)	13:11
-3+50				11.9	1.3	
W-2+37				9.6	3.6	
W-1+30				6.9	6.3	
W-0+57				5.5	7.7	
0+00				4.4	8.8	
E-0+70				5.9	7.3	
E-1+90				7.1	6.1	
E-3+10				8.5	4.7	
E-4+50	8.30 2.60 57.0			8.5	4.7	
E-5+70				8.9	4.3	
E-7+50				10.3	2.9	

	DIST	+	H.I.	-	ELEV	TIDE AT
WEST -		11.0	12.3		(1.3)	13:25
E-8+90				11.0	1.3	
E-7+50				9.4	2.9	
E-6+30				8.6	3.7	
E-5+60				6.4	5.9	
E-5+00				5.1	6.9	
E-4+80				7.6	4.7	
E-3+70				6.8	5.5	
E-2+50				6.1	6.2	
E-1+05				5.6	6.7	
0+00				5.2	7.2	
W-0+17				3.4	8.9	
W-1+60				6.6	5.7	
W-2+50				8.5	3.8	
W-3+05				9.7	2.6	

STA-129+00

4-1-48

STA-128+00

4-1-48

(38)

0+00 = PT. 270' EAST STA-129+00 PATERA B/L.

0+00 = PT. 230' EAST OF STA-128+00 PATERA B/L.

DIST WATER LEVEL	+	H.I.	-	ELEV	TIDE AT
	11.5	12.8		(1.3)	13:42
W- ³ / ₂ +10			9.8	3.0	
W-2+30			8.3	4.5	
W-1+50			7.1	5.7	
W-1+03			5.4	7.4	
0+00	550 270 280		5.1	7.7	
E-1+10			5.8	7.0	
E-2+35			6.8	6.0	
E-3+50			7.3	5.5	
E-4+65			7.6	8.2	
E-5+65			7.9	4.9	
E-7+00			10.1	2.7	
E-7+80			11.5	1.3	

DIST WATER LEVEL	+	H.I.	-	ELEV	TIDE AT
	11.5	12.9		(1.4)	13:50
E-7+10			11.5	1.4	
E-6+10			10.0	2.9	
E-5+20			6.9	6.0	
E-4+30			4.9	8.0	
E-3+30			7.0	5.9	
E-2+10			6.3	6.6	
E-1+55			4.3	8.6	
E-0+80			4.2	8.7	
0+00			5.0	7.9	
W-0+30			5.8	7.1	
W-2+10			9.4	3.5	
W-					

STA-127+00

4-1-48

STA-126+00

4-1-48

0+00 = PT. 240' EAST OF STA-127+00 PATERA B/L.

0+00 = PT. 390' EAST OF STA-126+00 PATERA B/L.

(39)

DIST	+	H.I.	-	ELEV	TIDE AT
WATER					14:22
LEVEL	10.0	14.5		(1.5)	14:16

DIST	+	H.I.	-	ELEV.	TIDE AT
WATER					14:21
LEVEL	10.8	12.3		(1.5)	14:21

W-2+60

9.2 2.3

E-5+30

10.8 1.5

W-2+15

9.3 2.2

E-4+20

8.9 3.1

W-2+25

6.4 5.1

E-2+80

6.5 5.8

W-1+60

6.1 5.4

E-1+75

5.3 7.0

W-1+50

7.2 4.3

E-1+57

4.2 8.1

W-0+70

6.4 5.1

E-1+16

5.4 6.9

0+00

7.8 6.7

E-0+51

4.5 7.8

E-0+36

3.7 7.8

0+00

4.9 7.7

E-2+30

3.4 8.1

W-0+80

6.7 5.6

E-3+00

5.2 6.3

W-1+65

8.1 4.2

E-3+60

3.7 7.8

W-3+15

9.6 3.3

E-4+55

6.1 5.4

E-5+60

8.4 3.1

E-6+70

10.0 1.5

E-

STA-125+00

4-1-48

0+00 = PT. 300' EAST OF STA-125+00 PATERA B/L.

DIST	+	H.I.	-	ELEV.
WATER LEVEL	8.4	10.0		(1.6)
W-2+25			7.3	2.7
W-1+88			6.2	3.8
W 1+10			6.0 <small>OPENS FROM GRND</small>	4.0
0+00			5.1	4.9
E-0+90			4.2	5.8
E-2+10			4.9	5.1
E-3+35			6.0	4.0
E-4+30			6.9	3.1
E-5+20			8.4	1.6

STA-124+00

4-1-48

0+00 = PT. 480' EAST OF STA-124+00 PATERA B/L.

(90)

DIST	+	H.I.	-	ELEV.	TIDE AT
WATER LEVEL	7.8	9.6		(1.8)	14:55
E-2+90			7.8	1.8	
E-2+85			7.0	2.6	
E-1+80			6.1	3.5	
E-0+93			5.4	4.2	
0+00			5.0	4.6	
W-1+20			5.0	4.6	
W-2+00			5.8	3.8	
W-2+85			6.6	3.0	

STA-123+00

7-1-98

(91)

0+100=STA 123+00 ON PATERA B/L

	DIST. +	H.I.	-	ELEV	TIDE AT
WATER				(1.8)	15:03
LEVEL	7.3	9.1			
E-3+26			6.0	3.1	GROUND #1
E-4+00			5.8	3.3	#2
E-5+20			5.8	3.3	#2
E-5+85			5.9	3.2	GROUND #2

FINAL

7-19-98

STA-88+00

7-19-98

(42)

SOUNDINGS OF APPROACH CHANNEL SECT. "D" PROJ. #3-1

DIST SOUND

DIST SOUND

STA-89+00

3+40 4.5 -0.1

0+00 = STA-89+00 SECT. "D" B/L: SOUND SOUTH AT 90° TO L

50 4.5 —

DIST SOUND DIST SOUND

4.5 —

0+00 = +P

1+70 13.2 -8.8

(4.4) 4.5 —

0+15 0.0 +4.4

13.2 —

4.6 -0.2

0+20 0.5 +3.9

(4.4) 13.1 -8.7

4.8 -0.4

09:27

1.2 +3.2

2+00 13.2 -8.8

4+00 4.5 -0.1

(4.4)

2.5 +1.9

13.4 -9.0

09:33

50 3.8 +0.6

13.4 —

5.1 -1.0

13.2 -8.8

6.8 -2.4

13.0 -8.6

7.9 -3.5

50 12.5 -8.5

9.5 -5.1

12.5 —

1+00 11.1 -6.7

12.4 -8.0

11.3 -6.9

12.1 -7.7

11.3 —

12.0 -7.6

11:30 11.4 -7.0

3+00 12.1 -7.5

11.4 —

12.2 -7.6

50 11.8 -7.4

12.1 -7.5

1+60 12.4 -8.0

3+30 8.0 -3.0

1-19-18

STA-90+00

0+00 = STA-90+00 SECT "D" 1/4 SOUND SOUTH AT 8:30

DIST	SOUND	DIST	SOUND
0+00	+?	1+70	12.7 -84
0+06	0.0 +4.3		12.5 -8
0+10	0.3 +4.0 (4.3)		12.6 -8
<u>09:40</u>	0.9 +3.4	2+00	12.9 -8
	1.5 +2.8		12.9 -
(4.3)	2.5 +1.8		12.9 -
50	3.6 +0.7		12.1 -7
	5.0 -0.7		12.0 -7
	6.3 -2.0	50	12.0 -
	7.0 -2.7		12.1 -7
	9.5 -5.2		12.1 -
1+00	10.1 -5.8		12.3 -8
	10.0 11.0 -6.7		12.3 -
	12.3 -8.0	3+00	12.6 -8
	12.7 -8.4		12.5 -8
	12.9 -8.1		11.0 -6
50	12.5 -8.2		9.8 -0
1+60	12.5 -	3+40	9.5 -0

STA-90+00

1-19-18

(43)

DIST SOUND

DIST SOUND

3+50	4.5	-0.2
	4.9	-0.1
(4.3)	4.4	-
	4.3	0.0
	4.3	-
4+00	4.3	-

03:45

7-19-48

STA-91+00

7-19-48

(77)

PX

STA-91+00

DIST SOUND

DIST SOUND

PX

0+00 = STA-91+00 SECT. "D" 3/4; SOUND SOUTH AT 30'

3+50 4.1 -0.1

DIST SOUND DIST SOUND

4.0 0.0

0+00 +? 1+20 12.1 -8.1

4.0 -

0+05 0.0 +4.0 12.2 -8.2

(4.0)

4.0 -

+10 0.3 +3.7 (4.0) 12.3 -8.3

4.8 -0.8

09:55 0.9 +3.1 2+0.0 12.3 -

4+00 4.5 -0.5

1.6 +2.4 12.3 -

10.00

(4.0) 2.5 +1.5 12.3 -

50 3.7 +0.3 12.2 -8.2

5.7 -1.7 12.0 -8.0

6.1 -2.1 50 12.0 -

2.4 -3.4 12.0 -

2.0 -5.0 12.0 -

1+00 10.2 -6.2 12.0 -

11.2 -7.2 12.1 -8.1

11.8 -7.8 3+00 12.0 -8.0

11.7 -7.7 11.8 -7.8

12.0 -8.0 9.5 -5.5

50 12.1 -8.1 4.7 -0.7

1+00 12.1 - 3+40 4.2 -0.2

7-13-78

STA-92+00

7-13-78

(75)

STA-92+00

DIST SOUND

DIST SOUND

0+00 = STA-92+00 SECT. "D" 1/4. SOUND SOUTH AT 90°

3+60 4.0 -0.2

DIST SOUND

DIST SOUND

4.0

0+00

+?

1+80

12.3

-8.5

(38)

4.0

0+17

0.0

+3.8

12.3

4.0

0+20

0.2

+3.6

2+00

12.4

-8.6

4+00

4.0

10:08

1.0

+2.8

(3.8)

12.2

-8.4

11:13

(3.8)

2.3

+1.5

12.2

50

3.8

0.0

12.2

4.6

-0.8

12.2

6.8

-3.0

50

12.3

-8.5

6.8

12.8

-9.0

7.7

-3.9

13.1

-9.3

1+00

8.7

-4.9

13.3

-9.5

10.8

-7.0

13.4

-9.6

12.5

-8.7

3+00

13.2

-9.4

12.6

-8.8

13.2

12.4

-8.6

10.4

-6.6

50

12.3

-8.5

5.3

-1.5

12.3

7.4

-0.6

1+70

12.3

3+50

4.0

-0.2

9-19-48

STA-93+00

9-19-48

(72)

STA-93+00

DIST SOUND

DIST SOUND

0+00=STA-93+00 SECT. "D" B/A: SOUND SOUTH AT 90°

2720 3.7 -0.1

DIST SOUND DIST SOUND

3.8 -0.2

0+00 +? 1+90 14.0 -10.4

3.9 -0.3

0+35 0.0 +3.6 2+00 14.3 -10.6

4+00 3.7 -0.1

+30 0.5 +3.1 14.0 -10.4

10:35

10:20 1.8 +1.8 (3.6) 14.1 -10.5

(3.6)

50 3.2 +0.4 13.8 -10.2

(3.6) 5.2 -1.6 13.9 -10.3

6.1 -2.5 50 13.9 —

7.2 -3.6 14.1 -10.5

8.3 -4.7 14.1 —

1+00 9.0 -5.4 14.2 -10.6

11.3 -7.7 14.2 —

12.4 -8.8 3+00 14.4 -10.8

12.8 -9.2 14.0 -10.4

13.3 -9.7 12.0 -8.4

50 13.7 -10.1 5.0 -1.4

13.9 -10.3 4.1 -0.5

14.0 -10.4 50 3.4 +0.2

1+80 14.3 -10.7 3+60 3.5 +0.1

7-19-18

STA- 99+00

07:00 - STA- 99+00 SECT. "D" 3/4: SOUND SOUTH AT 90° TO L

DIST	SOUND	DIST	SOUND
0400	+ ?	1790	12.7 -9.2
0423	0.0 +3.5	2100	12.7 —
30	1.0 +2.5		12.5 -9.0
10:30	2.2 +1.3	(3.5)	12.0 -8.5
50	4.5 -1.0		12.2 -8.7
(3.5)	6.5 -3.0	50	12.4 -8.9
	8.3 -4.8		12.1 -8.6
	9.5 -6.0		12.1 —
1100	9.5 —		12.2 -8.7
1700	9.5 —		12.3 -8.8
	11.6 -8.1	3+00	12.3 —
	11.8 -8.3		12.0 -8.5
	12.0 -8.5		9.8 -6.3
50	12.0 —		9.8 —
			3.7
50	12.3 -8.8		7.7 -0.2
			3.7
	12.3 —	50	7.7 —
			3.5
	12.8 -9.3		7.5 0.0
			3.5 —
1780	12.8 —	3+70	7.5 —

STA- 99+00

7-19-18

(97)

DIST SOUND

DIST SOUND

3+80 3.5
 7.5 0.0
 3.5 —
 7.5 —
 3.5 —
 7.5 —

10:35

(3.5)

7-19-78

STA-95+00

0+00 - STA-95+00 SECT. "D" 7/4; SOUND SOUTH AT 90°

DIST	SOUND	DIST	SOUND
0+00	+?	2+00	12.5 -9.1
0+29	0.0 +3.4	12.2	-8.5
+30	+1.2	(3.7)	12.2
10:45 40	1.2 +2.2	11.1	-7.7
50	2.0 +1.4	11.1	-
(3.7)		50	11.2 -7.5
70	5.7 -2.3	11.8	-8.5
80	6.7 -3.3	11.9	-8.5
90	8.3 -4.9	11.9	-
1+00	9.8 -6.4	12.0	-8.5
10.1	-7.0	3+00	12.0 -
11.2	-7.8	11.5	-8.1
11.5	-8.1	10.8	-7.6
11.5	-	7.1	-4.0
50	11.6 -8.2	3.6	-0.5
12.0	-8.6	50	3.2 +0.2
12.3	-8.9	3.2	-
80 12.3	-		
1+90 12.4	-9.0	3+70	3.3 +0.1

STA-95+00

7-19-78

(78)

DIST SOUND DIST SOUND

3+80 3.4 0.0

3.4 -

4+00 3.3 +0.1

10:50

(3.7)

7-19-48

STA-96+00

7-19-48

(79)

PX STA-96+00

0+00 = STA-96+00 Sect. D 3/4 Sound South At 0+00

DIST SOUND

DIST SOUND

DIST	SOUND	DIST	SOUND
0+00	+ ?	1+90	12.0 -8.8
0+25	0.0 +3.2	2+00	12.0 —
30	0.6 +2.6		12.2 -9.0
10:55	1.5 +1.7 (3.2)		12.1 -8.9 (3.2)
50	3.0 +0.2		12.0 -8.9
(3.2)	5.1 -1.9		12.0 —
	5.5 -2.3	50	12.3 -9.1
	6.4 -3.2		12.1 -8.9
	8.3		12.0 -8.9
	6.3 -5.1		12.0 -8.9
1+00	8.3 —		11.9 -8.7
	9.0 -5.8		11.7 -8.5
	11.1 -7.9	3+00	11.6 -8.4
	12.6 -9.4		11.8 -8.6
	12.1 -8.9		10.8 -7.6
50	12.1 —		5.2 -2.0
	12.5 -9.3		3.4 -0.2
	12.2 -9.0	50	3.2 0.0
1+80	12.1 -8.9	3+60	3.0 +0.2

7+70 3.0 +0.2

3.2 0.0

3.0 +0.2

4+00 3.0 —

11:00

(3.2)

PX

STA-97+00

6+00=STA-97+00 SECT. "D" 1/4. SOUND SOUTH AT 90° TO 3/4

DIST	SOUND		DIST	SOUND	
0+00	+ ?		1+90	11.1	-8.3
0+22	0.0	+2.8	2+00	11.2	-8.4
30	0.3	+2.5		11.3	-8.5
11:18	1.7	+1.4	(2.8)	11.2	-8.4
50	2.5	+0.3		11.2	—
(2.8)	5.3	-2.5		11.0	-8.2
	5.5	-2.7	50	11.0	—
	6.1	-3.3		11.0	—
	8.4	-5.6		11.0	—
1+00	10.0	-7.2		11.0	—
	10.3	-7.5		11.2	-8.4
	11.0	-8.2	3+00	11.7	-8.6
	11.7	-8.9		11.5	-8.7
	11.7	—		11.2	-8.4
50	11.5	-8.7		7.0	-4.2
	11.0	-8.2		4.5	-1.7
	11.0	—	50	2.8	0.0
1+80	11.0	—	3+60	2.7	+0.1

STA-97+00

7-19-98

(50)

DIST	SOUND	
3+70	3.0	-0.2
	2.8	0.0
	2.8	—
	2.8	—

DIST SOUND

11:23

(2.8)

STA-98+00

0+00=STA-98+00 SECT. "D" 8/4: SOUND SOUTH AT 90° T. 8/4

DIST	SOUND		DIST	SOUND	
0+00	+?		1+80	12.4	-9.7
0+15	0.0	+2.7		12.4	—
+20	0.2	+2.5	2+00	12.0	-9.5
11:30	1.2	+1.5		12.0	—
(2.7)	2.1	+0.6	(2.7)	11.8	-9.1
50	4.0	-1.3		11.5	-8.8
	5.8	-3.1		11.8	-9.1
	6.7	-4.0	50	12.1	-9.4
	7.3	-4.6		12.4	-9.7
	8.5	-5.8		12.4	—
1+00	9.1	-6.4		12.5	-9.8
	10.0	-7.3		12.3	-9.6
	10.9	-8.2	3+00	12.2	-9.5
	12.0	-9.3		11.8	-9.1
	12.5	-9.8		10.0	-7.3
50	12.4	-9.7		4.1	-1.4
	12.4	—		2.8	-0.1
1+70	12.4	—	3+50	2.7	0.0

STA-98+00

7-19-48

(5)

DIST SOUND DIST SOUND

3+60 - 2.7 0.0

2.7 —

(2.7) 2.7 —

2.7 —

2.7 —

11:35

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

2.7 —

NOT NEEDED

7-19-78

STA-99700

7-19-78

(52)

STA-99700

DIST SOUND

DIST SOUND

0700 = STA-99700 SECT. "D" B/L: SOUND SOUTH AT 90° To

7+30 4.3

DIST SOUND

DIST SOUND

2.0

N 0 0

1750 11.0

50 2.1

N-0720 0.0

11.1

2.2

N-0710 1.5

(2.5) 11.0

(2.5) 2.1

0700 2.8

11.2

2.2

S- 710 3.0

11.2

2.1

11:43

4.7

2700 11.2

9700 2.1

(2.5)

6.0

11.1

11:18

7.1

11.2

50 8.1

11.4

10.0

11.3

10.0

50 11.2

10.5

11.2

11.3

11.5

1700 11.0

11.2

11.0

11.3

11.0

3700 11.6

11.0

11.4

1740 11.0

3720 10.0

SOUNDINGS OF BORROW AREA NORTH OF CHANNEL

DIST SOUND

DIST SOUND

SECTION "D" STA. 2 60+00 TO 66+00

3+60

7.6 -6.5

END SECTION ALONG SECTION "D" B/L. FROM STA. 60+00

7.5 -6.4

0+00 = STA. 60+00 SECT. "D" B/L. SOUND EAST.

(11)

7.1 -6.3

DIST SOUND

DIST SOUND

2.0

0+00

0.5

-0.9

2+00

8.5

-7.4

4+00

7.1

—

+50

1.1

0.0

13:45

8.7

-7.6

7.8

-6.7

+60

1.0

+0.1

8.2

-7.1

8.1

-7.0

13:42

1.0

—

(11)

8.2

—

8.5

-7.4

(11)

0.9

+0.2

8.7

-7.6

8.5

—

1.0

+0.1

50

8.5

-7.4

50

8.0

-6.9

1+00

6.5

-5.4

8.8

-7.7

8.2

-7.1

9.0

-7.9

8.2

-7.1

8.0

-6.9

9.0

—

8.5

-7.4

8.0

—

9.0

—

8.5

—

13:50

8.0

—

8.9

-7.8

3+00

8.2

-7.1

5+00

7.8

-6.7

50

8.7

-7.6

8.4

-7.3

6.5

-5.4

8.8

-7.7

8.2

-7.1

1.5

-0.4

8.5

-7.4

8.0

-6.9

0.6

+0.5

8.5

-7.4

8.0

—

1+90

8.4

-7.3

3+50

7.8

-6.7

5+50

7-19-18

END SECTION 200' N

7-19-18

(57)

END SECTION 200' NORTH STA-60+00 "D" B/L.

DIST SOUND

DIST SOUND

0+00 = PT. 200' NORTH OF STA-60+00 "D" B/L: SOUND EAST

4+00 8.4 -7.5

DIST SOUND DIST SOUND

8.2 -7.3

0+00 1.4 -0.5 2+20 7.8 -6.9 (0.9) 8.2 —

+50 1.5 -0.6 8.0 -7.1 8.0 -7.1

13:59 1.5 — (0.9) 8.0 — 8.0 —

1.5 — 50 8.0 — 50 8.0 —

(0.9) 1.5 — 8.6 -7.7 8.1 -7.2

1.7 -3.8 9.0 -8.1 8.3 -7.4

1+00 8.0 -7.1 8.8 -7.2 8.2 -7.3

9.0 -8.1 8.8 — 8.0 -7.1

8.5 -7.6 3+00 8.6 -7.7 5+00 7.1 -6.2

8.2 -7.3 8.7 -7.5 2.5 -1.6

8.2 — 8.7 — 5+20 2.1 -1.2

50 8.2 — 8.7 — 14:00

8.2 — 14:05 8.1 -7.2

9.0 -8.1 50 8.1 —

9.1 -8.2 7.8 -6.9

9.1 — 8.2 -7.3

2+00 8.5 -7.6 8.2 —

2+10 8.0 -7.1 3+90 8.4 -7.5

9-13-48

STA-69700

9-19-48

(55)

1 STA-69700

0+00 = Pt 100' N/STA-69700 D 3/4 : SOUND SOUTH

DIST	SOUND	DIST	SOUND
0+00	0.0	+0.7	1+80 7.7 -7.0
+10	7.0	-6.3	7.6 -6.9
14:20	8.3	-7.6	2+00 7.7 -7.0
(0.7)	8.0	-7.3	(0.7) 8.2 -7.5
	8.0	—	8.1 -7.4
50	8.0	—	8.0 -7.3
	8.1	-7.4	8.0 —
	8.1	—	50 7.7 -7.0
	8.0	-7.3	7.7 —
	8.0	—	7.8 -7.1
1+00	8.0	—	14:25 7.5 -6.8
	8.0	—	7.5 —
	7.5	-6.8	3+00 7.5 —
	7.5	—	7.7 -7.0
	7.5	—	7.5 -6.8
50	7.5	—	7.5 —
	7.5	—	7.5 —
1+70	7.6	-6.9	3+50 7.5 —

DIST	SOUND	DIST	SOUND
3+60	7.1	-6.7	5+60 8.0 -7.3
	7.2	-6.5	8.2 -7.5
(0.7)	7.2	—	(0.7) 8.2 —
	7.2	—	8.4 -7.7
4+00	7.2	—	6+00 8.4 —
	7.4	-6.7	8.5 -7.8
	7.5	-6.8	8.5 —
	7.5	—	8.5 —
	9.4	-8.7	8.6 -7.9
50	9.8	-9.1	50 8.5 -7.8
	9.7	-9.0	14:30 8.5 —
	9.5	-8.8	8.5 —
	9.8	-9.1	8.5 —
	10.0	-9.3	8.5 —
5+00	9.8	-9.1	7+00 8.1 -7.4
	9.7	-9.0	8.0 -7.3
	9.0	-8.3	
	8.5	-7.8	
	8.0	-7.3	
5+50	8.0	—	

SOUNDINGS OF APPROACH CHANNEL SECTION "D"

DIST SOUND

DIST SOUND

PX

STA-80+00

3+40 4.7 -0.7

PX

0+00 = STA-80+00 SECT. "D" B/L: SOUND SOUTH APPROACH

50 4.4 -0.4

DIST SOUND DIST SOUND

4.5 -0.5

0+00 2.7 +1.3 1+20 11.5 -7.5

(4.0) 4.5 -

+10 2.2 +1.8 09:25 11.5 -

4.6 -0.6

09:20 1.9 +2.1 (4.0) 11.5 -

4.6 -

1.9 - 2+00 11.6 -7.5

4+20 4.5 -0.5

(4.0) 1.9 - 11.6 -

50 1.9 - 11.6 -

2.0 +2.0 11.6 -

2.0 - 11.6 -

2.7 +1.3 50 11.6 -

5.8 -1.8 11.6 -

1+00 11.0 -7.0 11.7 -7.7

11.1 -7.1 11.8 -7.8

11.1 - 11.9 -7.9

11.3 -7.3 3+00 11.9 -

11.3 - 11.9 -

50 11.4 -7.4 11.8 -7.8

1+60 11.4 - 3+30 6.0 -2.0

5-9-48

~~PX~~

STA-79+00

0+00 = STA-79+00 SECT. "D" D/L: SOUND SOUTH AT 90° T&B

DIST	SOUND		DIST	SOUND	
0+00	2.1	+1.8	1+80	10.8	—
+10	2.0	+1.9	09:35	10.8	—
09:33	2.0	—	2+00	10.8	—
	2.1	+1.8		11.1	-7.2
(3.9)	3.2	+0.7	(3.9)	11.4	-7.5
50	3.2	—		11.4	—
	3.0	+0.9		11.5	-7.4
	3.0	—	30	11.5	—
	3.0	—		11.6	-7.7
	3.8	+0.1		11.6	—
1+00	9.7	-5.8		12.0	-8.1
	10.9	-7.0		12.0	—
	10.9	—	3+00	12.0	—
	10.8	-6.9		12.1	-8.2
	10.7	-6.8		12.2	-8.3
50	10.8	-6.9		6.1	-2.2
	10.8	—		4.4	-0.5
1+70	10.8	—	3+50	4.4	—

5-9-48

STA-79+00

(59)

DIST SOUND DIST SOUND

3+60	4.2	-0.3			
	4.4	-0.5			
(3.9)	4.2	-0.3			
	4.2	—			
4+00	4.2	—			

SOUNDINGS OF DE ANZA COVE PROJECT #3-1

STA-166+00-N

STA-167+00

0+00=STA-N-166+00 DE ANZA COVE B/L: SOUND DUE WEST

0+00=STA-N-167+00 DE ANZA COVE B/L: SOUND DUE WEST

DIST SOUND

DIST SOUND

DIST SOUND

DIST SOUND

0+00 + ?

0+00 + ?

2+00 10.5

-7.5

0+60 0.0 +2.8

0+79 0.0 +3.0

50 10.6

-7.6

+70 1.7 +1.1

90 3.2 -0.2

10.6

-

120 3.8 -1.0

1+00 3.2

-

(3.0)

11.0

-8.0

(2.8) 4.4 -1.6

11:10 4.3

-1.3

10.8

-1.8

1+00 5.6 -2.8

4.4 -1.4

10.7

-7.7

6.0 -3.2

(3.0) 5.0

-2.0

3+00

10.0

-7.0

6.2 -3.9

6.0 -3.0

11:13

2.8 -5.0

50 5.9 -2.9

8.5 -5.7

6.4 -3.4

50 9.3 -6.5

7.1 -4.1

9.4 -6.6

8.0 -6.0

10.9 -8.1

9.7 -6.7

11.0 -8.2

2+00 10.1 -7.1

11.8 -9.0

9.7 -6.9

2+00 12.0 -9.2

9.7

2+30 10.0 -7.0

5-5-78

PX

STA-165700-N

0+00=STA-N-165700 DE-ANZA COVE 3/4; SOUND DUE WEST

DIST	SOUND		DIST	SOUND
0+00	+?		2+20	13.4
0+56	0.0	+4.2		13.5
+60	0.5	+3.7	(4.2)	12.8
<u>09:38</u>	2.5	+1.7	50	12.8
	4.6	-0.9	<u>09:42</u>	
(4.2)	6.7	-2.5		
1+00	7.0	-2.8		
	7.0	-		
	7.5	-3.2		
	7.9	-3.7		
	10.2	-6.0		
50	11.0	-6.8		
	12.4	-8.2		
	13.1	-8.9		
	13.1	-		
	13.1	-		
2+00	13.1	-		
2+10	13.1	-		

5-5-78

PX

(59)

STA-169700

0+00=STA-N-169700 DE-ANZA COVE 3/4; SOUND DUE WEST

DIST	SOUND		DIST	SOUND
0+00	+?		2+20	13.0
0+55	0.0	+4.2		12.8
+60	0.9	+3.3	(4.2)	12.6
<u>09:45</u>	1.5	+2.7	50	12.5
	0.5			
	5.0			
	2.5	-0.8		12.3
(4.2)	6.7	-2.5		12.7
1+00	7.1	-2.9		12.3
	8.0	-3.8		12.8
	8.7	-4.3	3+00	12.9
	9.0	-4.8	<u>09:49</u>	
	9.6	-5.4		
50	11.3	-7.1		
	12.0	-7.8		
	12.5	-8.1		
	12.7	-8.5		
	13.0	-8.8		
2+00	13.4	-9.2		
2+10	13.0	-8.8		

5-5-78

PX

STA-N-163+00

0+00=STA-N-163+00 DE-ANZA COVE B/K. SOUND DUE WEST

DIST	SOUND	DIST	SOUND
0+00	+?	2+20	12.5 -8.5
+53	0.0 +4.0		12.8 -8.8
+60	1.0 +3.0 (4.0)		13.0 -9.0
(4.0)	2.7 +1.3	50	13.0 -9.0
	5.0 -1.0		12.6 -8.6
	6.5 -2.5		12.0 -8.0
1+00	6.8 -2.8		11.8 -7.8
	7.9 -3.9		11.7 -7.7
	8.2 -4.2	3+00	11.7 -7.7
	10.0 -6.0	10:02	
	10.2 -6.2		
50	11.0 -7.2		
	11.5 -7.5		
	11.7 -7.7		
10:00	11.8 -7.8		
	11.9 -7.9		
2+00	12.0 -8.0		
2+10	12.3 -8.3		

5-5-78

PX

(60)

STA-N-162+00

0+00=STA-N-162+00 DE-ANZA COVE B/K. SOUND DUE WEST

DIST	SOUND	DIST	SOUND
0+00	+?	2+20	12.2 -8.2
+51	0.0 +4.0		12.2 -
+60	1.0 +3.0 (4.0)		12.5 8.5
10:00	2.9 +1.1	50	12.7 8.7
(4.0)	5.7 -1.4		12.7 -
	6.1 -2.1		12.7 -
1+00	7.0 -3.0		12.7 -
	8.5 -4.5		12.7 -
	8.7 -4.7	3+00	12.5 8.5
	10.0 -6.0		12.5 -
	9.4 -5.4		12.5 -
50	9.7 -5.7		12.5 -
	12.0 -8.0		12.3 8.3
	12.0 -	50	12.0 8.0
	12.0 -	10:11	
	12.0 -		
2+00	12.1 8.1		
2+10	12.1 -		

5-5-48

STA-N-161+00

PX

0+00=STA-N-161+00 DE-ANZA COVE B/H: SOUND DUE WEST

DIST	SOUND		DIST	SOUND	
0+00	+?		2+30	12.0	-8.1
+62	0.0	+3.9		12.0	-8.1
+70	2.2	+1.7	50	12.6	-8.7
<u>10:19</u>	4.5	-0.6		12.4	-8.5
	5.0	-1.1	(3.9)	13.0	-9.1
1+00	6.5	-2.6		13.4	-9.5
(3.9)	7.1	-3.2		13.0	-9.1
	8.2	-4.3	3+00	12.3	-8.5
	10.1	-6.2		12.8	-8.9
	10.0	-6.1		12.8	-
50	10.4	-6.5		12.8	-
	10.9	-7.0		12.8	-
	12.0	-8.1	50	12.7	-8.8
	12.0	-8.1	<u>10:22</u>		
	12.5	-8.6			
2+00	12.6	-8.7			
	12.4	-8.5			
2+20	12.3	-8.4			

5-5-48

STA-160+00-N

PX (61)

0+00=STA-N-160+00 DE-ANZA COVE B/H: SOUND DUE WEST

DIST	SOUND		DIST	SOUND	
0+00	+?		2+20	12.8	-9.1
1+53	0.0	+3.7		12.6	-8.9
+60	0.3	+3.4	(3.7)	12.6	-
	2.4	+1.3	50	12.8	-9.1
(3.7)	4.7	-1.0		12.7	-9.0
	6.0	-2.3		12.5	-8.8
1+00	6.4	-2.7		12.5	-
	8.0	-4.3		12.6	-8.9
	8.8	-5.1	3+00	12.7	-9.0
	9.0	-5.3		13.1	-9.4
	9.5	-5.8		12.9	-9.2
50	10.0	-6.3		13.0	-9.3
	11.1	-7.4		12.5	-8.8
	12.0	-8.3	50	12.5	-
	12.8	-9.1		12.2	-8.5
	13.0	-9.3	3+70	12.2	-8.5
2+00	13.0	-	3+80	12.6	-8.9
2+10	13.0	-	<u>10:41</u>		

5-5-48

STA-N-159+00

DX

DIST SOUND

STA-N-159+00

5-5-48

DX

(62)

DIST SOUND

0+00=STA-N-159+00 DE-ANZA COVE B/K : SOUND DUE WEST

3+80 12.0 - 8.5

DIST SOUND

DIST SOUND

(35) 12.3 - 8.8

0+00 + ?

2+00 12.0 - 8.5

3+00 12.3 - 8.8

0+36 0.0 + 3.5 10:55 11.8 - 8.3

+ 40 0.4 + 3.1 11.6 - 8.1

+ 50 1.3 + 2.2 (3.5) 11.6 -

10:53 1.4 + 2.1 11.7 - 8.2

(3.5) 1.6 + 1.9 50 11.5 - 8.0

2.7 + 0.8 11.5 -

3.5 0.0 11.7 - 8.2

1+00 5.5 - 2.0 11.8 - 8.3

6.4 - 2.9 11.8 -

8.5 - 5.0 3+00 11.8 -

9.8 - 6.3 11.7 - 8.2

10.0 - 6.5 11.1 - 7.6

50 9.9 - 6.4 11.0 - 7.5

10.1 - 6.7 11.5 - 8.0

11.0 - 7.5 50 11.2 - 7.7

11.7 - 8.2 11.8 - 8.3

1+90 12.0 - 8.5 3+70 12.0 - 8.5

5-5-78

STA-158+00-N

PX

0+00=STA-N-158+00 DE ANZA COVE B/K: SOUND DUE WEST

DIST SOUND

DIST SOUND

0+00 +?

2+10 13.0 -9.6

0+10 0.0 +3.4

13.0 -9.6

+50 0.3 +3.1

(3.4) 12.8 -9.4

11:08 1.4 +2.011:10 12.8 -9.4

2.4 +1.0

50 12.7 -9.3

(3.4) 1.5 -1.1

12.7 -

5.0 -1.6

12.8 -9.0

1+00 6.0 -2.6

12.8 -9.4

6.8 -3.4

12.9 -9.5

8.3 -4.9

3+00 13.0 -9.6

8.7 -5.3

13.0 -

9.5 -6.1

13.0 -

50 9.5 -

12.8 -9.4

11.0 -7.6

12.3 -8.9

11.8 -8.7

50 12.2 -8.8

12.2 -8.8

12.3 -8.9

13.2 -

11.5 -8.1

2+00 13.0 9.6

3+80 12.3 -8.9

STA-158+00-N

5-5-78

PX

(63)

DIST SOUND

DIST SOUND

3+00 11.8 -8.4

1+00 11.6 -8.2

11.6 -

(3.4) 11.6 -

12.0 -8.6

12.2 -8.8

50 12.5 -9.1

5-5-18

STA-157+00-N

5-5-18

PX

(17)

STA-N-157+00

DIST SOUND

DIST SOUND

0+00=STA-N-157+00 DE-ANZA COVE B/L: SOUND DUE WEST

4+00

9.7

6.5

3+80

12.9

9.4

DIST SOUND

DIST SOUND

9.7

6.5

13.0

9.5

0+00 +?

2+20

11.6 -8.4

(3.2)

9.7

6.5

4+00

13.1

9.6

0+51 0.0 +3.2

11:25

11.6 -

9.8

6.6

13.0

9.5

60 1.2 +2.0

(3.2)

11.5 -8.3

10.0

6.8

(3.5)

13.1

9.6

11:23 2.7 +0.5

50

11.5 -

50

10.0

13.0

9.5

4.8 -1.6

11.7 -8.5

10.0

13.0

9.5

(3.2)

6.0 -2.8

11.8 -8.6

11.2

8.0

50

13.2

9.7

1+00 6.8 -3.6

12.0 -8.8

11.5

-8.3

12.8

9.3

7.0 -3.8

12.0 -

11.5

-8.3

13.0

9.5

7.7 -4.5

3+00

12.0 -

3+00

11.7

-8.5

13.4

9.9

8.3 -5.1

12.1 -8.9

SOUNDINGS AFTER SHOAL REMOVAL

11:28

5-5-18

13.7

10.2

10.0 -6.8

12.3 -9.1

3+00

PX 12.5

5-6-18

-9.0

5+00

13.6

10.1

50 11.0 -7.8

12.3 -

11:25

12.4

8.9

11:30

11.5 -8.3

12.0 -8.8

3.5

13.0

9.5

11.6 -8.4

50

11.5 -8.3

12.3

9.8

11.4 -8.2

10.7 -7.5

13.0

9.5

11.5 -8.3

9.8 -6.6

50

13.0

9.5

2+00 11.5 -

10.5 -7.3

13.0

9.5

2+10 11.5 -

3+90

9.7 6.5

3+70

12.9

9.4

PX

STA-N-156+00

5-6-98

STA-N-156+00

5-6-98

(65)

0+00=STA-N-156+00 DE ANZA COVE B/K: SOUND DUE WEST

DIST SOUND DIST SOUND

DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND
				3+80	13.8	-	9.4
					12.8	-	
0+00	+?	2+00	12.9	-	9.0	4+00	12.4
+35	0.0	+3.4	12.5	-	9.1		12.0
+40	0.2	+3.2	(3.9)	12.8	-	9.4	(3.9)
50	0.6	+2.8		12.0	-	9.6	
11:35	2.4	+1.0		13.0	-	9.6	11:30
(3.9)	4.0	-	0.6	50	13.0	-	9.6
	6.1	-	2.7		13.1	-	9.7
	6.1	-	2.7		13.1	-	
1+00	8.3	-	4.9		13.2	-	9.8
	8.8	-	5.4	11:38	13.2	-	
	9.8	-	6.4	3+00	13.5	-	10.1
	10.0	-	6.6		13.6	-	10.2
	11.1	-	7.7		13.7	-	10.0
50	11.7	-	8.3		13.0	-	9.6
	11.7	-			13.0	-	
	11.7	-		50	13.0	-	
	11.6	-	8.2		13.0	-	
1+30	11.7	-	8.3	3+70	13.3	-	9.9

P. X

STA-N-155+00

5-6-98

STA-N-155+00

5-6-98

(66)

0+00=STA-N-155+00 DE ANZA COVE B/L: SOUND DUE WEST

DIST SOUND
3+90 13.5 -9.1

DIST SOUND

DIST SOUND

DIST SOUND

4+00 13.5 -

0+00 + P

2+10 13.0 -9.7

13.3 -10.0

0+38 0.0 + 3.3

13.0 -

(3.3) 13.3 -9.9

50 1.8 + 1.5

(3.3) 13.0 -

13.2 -

11:47 4.0 -0.7

12.8 -9.5

13.2 -

(3.3) 4.7 -1.4

50 12.8 -

50 13.1 -9.8

5.8

~~6.8~~ -2.5

12.5 -9.2

13.1 -

6.8 -3.5

12.5 -

13.1 -

1+00 9.2 -5.9

12.5 -

13.0 -9.7

9.8 -6.5

11:50 12.5 -

13.0 -

11.0 -7.7

3+00 12.4 -9.1

5+00 12.8 -9.5

11.7 -8.4

13.0 -9.7

13.1 -9.8

12.0 -8.7

13.2 -9.9

13.0 -9.7

50 12.0 -

13.2 -

5+30 13.0 -

12.0 -

13.2 -

11:53

12.1 -8.8

50 13.2 -

12.5 -9.2

12.7 -9.4

12.6 -9.3

12.4 -9.0

2+00

12.8 -9.5

3+80 13.2 9.9

PX

N-154700

5-6-98

DIST

SOUND

DIST

SOUND

0+00=STA-N-154700 DE-ANZA COVE 3/4: SOUND DUE WEST

4+10

12.0 -9.2

DIST SOUND

DIST SOUND

12.0 -

0+00 +P

2+30 11.0 -8.2

12.0 -

65

~~+65~~

0.0 +2.8

12.33
~~13.33~~ 11.0 -

(2.8)

11.7 -8.9

+70 0.8 +2.0

50 11.0 -

50 12.0 -9.2

12.30

1.0 +1.8

11.0 -

12.0 -

(2.8)

3.6 -0.8

(2.8) 11.0 -

11.6 -8.8

1+00 4.2 -1.4

10.8 -8.0

11.2 -8.4

5.5 -2.7

10.8 -

11.8 -9.0

6.3 -3.5

3+00 10.8 -

5+00 11.7 -8.9

6.8 -4.0

11.0 -8.2

11.8 -9.0

7.1 -4.3

11.5 -8.7

11.8 -

50

8.2 -5.4

11.0 -8.2

11.8 -

9.2 -6.4

11.4 -8.6

11.3 -8.5

9.5 -6.7

50 12.0 -8.2

50 11.7 -8.6

9.7 -6.9

12.2 -9.4

11.7 -

9.5 -6.7

12.2 -

12.7 -9.6

2+00 10.0 -7.2

12.2 -

12.5 -9.7

10.2 -7.4

12.35

12.2 -

12.38

11.5
~~12~~ -8.7

2+20 10.8 -8.0

4+00

12.0 -9.2

8.38

6+00 11.2 -8.4

5-6-98

STA-154700

(67)

PX

5-6-48

N-153+00

0+00=STA-N-153+00 DE-ANZA COVE B/L: SOUND DUE WEST

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	+?	4+30	8.5 -6.1		
2+60	0.0 +2.4	<u>13:15</u>	11.1 8.7		
13:12	0.2 +2.2	50	11.1 8.7		
(2.4)	0.3 +2.1	(2.4)	11.5 9.1		
	0.4 +2.0		11.5 9.1	(2.1)	
3+00	0.5 +1.9		12.0 9.6		
	0.5 +1.9		12.2 9.8		
	0.7 +1.7	5+00	12.8 10.4		
	0.9 1.5		12.6 10.2		
	1.1 0.9 1.3		12.4 10.0		
30	1.3 1.1		12.4 10.0		
	1.2 1.2		11.5 9.1		
	1.5 0.9	50	12.0 9.6		
	2.0 0.4		12.0 9.6		
	2.2 +0.2		12.0 9.6		
4+00	3.2 -0.8		12.0 9.6		
	3.2 -0.8	8:19	11.5 9.1		
4+20	5.1 -2.7	6+00	10.6 -8.2		

5-6-48

(68)

STA-80+00-W

PX

400=STA-80+00W DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	+?	2+10	12.0 -9.9		
0+37	0.0 +2.1		11.5 9.4		
50	3.4 -1.3		11.5 9.4		
^{11:53}	4.8 2.7	(2.1)	11.3 9.2		
(2.1)	6.0 3.9	50	11.3 9.2		
	6.6 4.5		11.4 9.3		
	8.5 6.4		11.4 9.3		
1+00	9.2 7.1		11.3 9.2		
	10.5 8.4		11.0 8.9		
	10.5 8.4	3+00	11.0 8.9		
13:55	10.7 8.6		11.2 9.1		
	11.1 9.0	13:58	11.4 9.3		
50	11.4 9.3	(2.1)	11.6 -9.5		
	11.4 9.3	(2.0)	12.0 -10.0		
	11.6 9.5	50	12.1 10.1		
	12.0 9.9		12.2 10.1		
	12.5 10.4		12.0 10.0		
2+00	12.8 -10.7	3+80	12.0 -10.0		

~~PX~~ STA-80+00-W 5-6-48

DIST	SOUND	DIST	SOUND
3+90	12.0 -10.0	5+90	11.0 - 9.0
4+00	12.0 10.0	6+00	11.3 9.3
	12.0 10.0		11.0 9.0
(2.0)	11.5 9.5	(2.0)	11.0 9.0
	11.2 9.2		10.0 8.0
	11.2 9.2		9.5 7.5
50	11.0 9.0	50	8.9 6.9
<u>14:00</u>	11.6 9.6		7.5 5.5
	11.0 9.0		6.0 4.0
	10.8 8.8		5.3 3.3
	10.2 8.2		4.2 2.2
5+00	10.2 8.2	7+00	3.7 1.7
	10.0 8.0		3.0 -1.0
	10.0 8.0		0.8 +1.2
	10.0 8.0	7+22	0.0 +2.0
	10.1 8.1	<u>14:01</u>	
50	10.1 8.1		
	11.1 9.1		
	11.3 9.3		
5+80	11.2 9.2		

~~PX~~ STA-79+00-W 5-6-48 (69)

400=STA-79+00-W-DE-ANZA COVE B/L: SOUND SOUTH

DIST	SOUND	DIST	SOUND
1+00	+P	1+80	10.7 -8.9
2+15	0.0 +1.8	14:18	10.8 9.0
20	1.5 +0.3	2+00	10.8 9.0
<u>14:15</u>	3.8 -2.0		11.0 9.2
(1.8)	4.2 2.4	(1.8)	11.4 9.6
50	5.0 3.2		11.4 9.6
	5.9 4.1		10.7 8.9
	7.2 5.4	50	11.0 9.2
	7.8 6.0		11.0 9.2
	8.5 6.7		10.9 9.1
1+00	9.6 7.8		10.8 9.0
	10.1 8.3		10.8 9.0
	10.5 8.7	3+00	10.7 8.9
	10.1 8.3		10.7 8.9
	10.3 8.5		10.8 9.0
50	10.5 8.7		11.0 9.2
	10.1 8.3		11.0 9.2
1+70	10.4 -8.6	3+50	10.8 -9.0

PX STA-79+00.W 5-6-48
 DIST SOUND DIST SOUND
 3+60 10.8 -9.0 5+60 11.5 -9.7
 14:20 10.7 8.9 11.5 9.7
 10.7 8.9 11.4 9.6
 (1.8) 10.7 8.9 (1.8) 11.2 9.4
 7+00 10.8 9.0 6+00 11.5 9.7
 10.8 9.0 11.0 9.2
 10.7 8.9 12.0 10.2
 10.7 8.9 11.2 9.4
 10.7 8.9 10.8 9.0
 50 10.7 8.9 50 11.0 9.2
 10.7 8.9 10.8 9.0
 10.6 8.8 9.7 7.9
 10.5 8.7 8.8 7.0
 10.5 8.7 8.0 6.2
 5+00 10.6 8.8 7+00 6.5 4.7
 10.6 8.8 6.0 4.2
 10.6 8.8 5.6 3.8
 14:23 10.8 9.0 5.1 3.3
 11.1 9.3 4.6 2.8
 5+50 11.9 9.6 7+50 3.0 -1.2

PX STA-79+00.W 5-6-48 (70)
 DIST SOUND DIST SOUND
 1+60 1.8 -0.0
 7+65 0.0 +1.8
 14:27
 (1.8)

5-6-98

PK STA-78+00 W

0+00 = STA-W-78+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
N-0+10	0.0	+1.7			
0+00	2.5	-0.8	1+80	11.0	9.3
S-0+10	3.0	-1.3	14:38	10.5	8.8
14:35	3.7	2.7	2+00	9.5	7.8
(1.7)	4.5	2.8	(1.7)	9.6	7.9
	6.8	4.1		9.6	7.9
50	7.5	5.8		9.5	7.8
	8.0	6.3		9.5	7.8
	8.2	6.5	50	9.5	7.8
	9.1	7.4		9.5	7.8
	9.4	7.7		9.5	7.8
1+00	9.3	7.6		9.8	8.1
	9.5	7.8		10.0	8.3
	9.9	8.2	2+00	10.2	8.5
	10.0	8.3		10.4	8.7
	10.0	8.3		10.5	8.8
50	9.9	8.2		10.5	8.8
	9.9	8.2	14:40	10.5	8.8
1+70	10.0	8.3	3+50	10.7	9.0

STA-78+00 W

5-6-98

DIST. SOUND

PK DIST. SOUND

DIST.	SOUND		DIST.	SOUND	
3+60	10.8	9.1	5+60	10.6	8.9
	11.0	9.3		10.8	9.1
	10.8	9.1	(1.2)	10.7	9.0
(1.7)	10.8	9.1	14:43	10.4	8.7
4+00	10.6	8.9	6+00	10.0	8.3
	10.5	8.8		9.0	7.3
	10.5	8.8		9.0	7.3
	10.5	8.8		9.5	7.8
	10.8	9.1		9.8	8.1
50	11.0	9.3	50	10.1	8.4
	11.1	9.4		10.1	8.4
	11.2	9.5		10.5	8.8
	11.5	9.8		10.8	9.1
	11.5	9.8		10.9	9.2
5+00	11.2	9.5	7+00	10.9	9.2
	11.0	9.3		10.6	8.9
	11.0	9.3		10.5	8.8
	11.0	9.3		9.8	8.1
	11.0	9.3	14:45	8.8	7.1
5+50	10.5	8.8	7+50	8.8	7.1

~~PX~~
 DIST SOUND DIST SOUND

7+60 8.0 -6.3

7.1 5.4

(1.7) 6.0 4.3

4.9 3.2

8+00 4.7 3.0

4.5 2.8

4.0 2.3

3.0 1.3

2.0 -0.3

50 1.7 +0.3

0.9 +0.8

8+65 0.0 +1.7

17.47

4/W

(73)

5-20-48

STAMPER
BARRAGAN
SAERRY
STANLEY

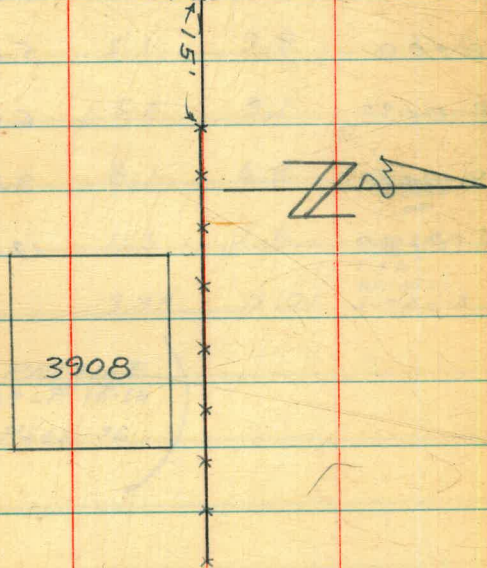
SOUNDINGS OF PROPOSED
PIER AT 3908 RIVERIA
DRIVE MISSION BAY

STA	+	H.I.	-	ELEV.	
	9.3	13.3	4.0		
0+00			4.7	8.6	
0+09			7.2	6.1	
0+30			8.3	5.0	
0+50			9.2	4.1	
DIST	SOUND		DIST	SOUND	
0+60	0.2	+3.7	1+60	4.7	-0.8
<u>11:00</u> 70	0.7	+3.2	70	4.0	-0.1
80	1.3	+2.6	80	2.6	+1.3
N.W. PROP. COR. $\frac{3}{4}$ " I.P.					
85.5	1.6	+2.3	90	2.1	+1.8
90	2.0	+1.9	2+00	2.0	+1.9
1+00	1.2	-0.3		2.0	+1.9
(3.9) 10	5.4	-1.5	(39)	2.0	+1.9
20	6.0	-2.1		2.1	+1.8
30	5.7	-1.8		2.1	+1.8
40	5.5	-1.6	2+50	2.3	+1.6
1+50	5.5	-1.6			

TOP H₂O 10:55 A.M.

1" I.P. N.W. COR.

0+500



RIVERIA DRIVE

PROFILE ALONG N/W SHORE PROPOSED PERMANENT BRIDGE SITE

PROFILE ALONG N/W SHORE PROPOSED TEMP BRIDGE SITE

0+00 = 2"x2" HUB AT N/W END OF BRIDGE: SECTION N/E S.

0+00 = 2"x2" HUB AT N/W END OF BRIDGE: SECTION N/E S.

STATION	+	H.I.	-	ELEV
B.M.	4.60	15.90		11.30
N-285'			4.65	11.3
N-227'			4.5	11.4
N-190'			4.5	11.4
N-175'			3.9	12.0
N-125'			4.0	11.9
N-75'			4.6	11.3
0+00			5.1	10.8
S-0+33			6.6	9.3
S-0+70			9.2	6.7
S-0+89			12.1	3.8

PX
TOP CONC. MAX.
TEMP. BRIDGE
N/W END
11.30
4.60
15.90

EDGE
OF
WATER

STATION	+	H.I.	-	ELEV
B.M.	3.65	14.95		11.30
N-392'			3.1	11.8
N-325'			3.6	11.3
N-265'			3.6	11.3
N-210'			3.3	11.6
N-145'			3.4	11.5
N-85'			3.4	11.5
0+00			5.1	9.8
S-0+32			5.8	9.1
S-0+65			8.1	6.8
S-0+90			11.3	3.6
T.P.			3.94	11.01

EDGE
OF
WATER
1"x2"
BETWEEN
J-4 & J-3

(REST OF PROFILE
F.B. # 37-PP. 15-16
THIS BOOK PAGE 76)

[J-4]

0+00 = 2"x2" HUB 470' S/E OF RADIUS "J"

STATION	+	H.I.	-	ELEV
T.B.M.	4.31	15.32		11.01
N-54			0.7	14.6
0+00			5.2	10.1
S-0+50			8.5	6.8
S-0+76			11.4	3.9

[J-3]

0+00 = 2"x2" HUB 470' S/E OF RADIUS "J"

STATION	+	H.I.	-	ELEV
T.B.M.	4.30	15.31		11.01
N-65'			0.3	15.0
0+00			5.3	10.0
S-0+38			8.6	6.7
S-0+66			11.6	3.7
T.P.			3.88	11.93

PX

1" x 2"

BETWEEN

J-4 & J-3

↓

WATER

1" x 2"

BETWEEN

J-2 & J-1

↓

WATER

1" x 2"

BETWEEN

J-2 & J-1

↓

WATER

1" x 2"

BETWEEN

J-2 & J-1

↓

WATER

1" x 2"

BETWEEN

J-2 & J-1

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J-2 & J-1

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WATER

1" x 2"

BETWEEN

J-2 & J-1

↓

WATER

[J-2]

0+00 = 2"x2" HUB 470' S/E OF RADIUS "J"

STATION	+	H.I.	-	ELEV
T.P.	3.81	15.24	15.24	11.43
N-84'			0.1	15.1
N-33'			4.9	10.3
0+00			5.3	9.9
S-0+30			7.4	7.8
S-0+52			9.2	6.0
S-0+73			11.5	3.7

[J-1]

0+00 = 2"x2" HUB 470' S/E OF RADIUS "J"

STATION	+	H.I.	-	ELEV
T.P.	9.52	15.95		11.43
N-100'			1.1	14.8
N-67'			5.4	10.5
0+00			5.4	10.5
S-0+22			5.9	10.0
S-0+62			9.3	6.6
S-0+74			9.8	6.1
S-0+96			12.2	3.7
T.P.	7.30	18.19	5.12	10.83
			6.91	11.28

1" x 2"

BETWEEN

J-2 & J-1

↓

PX

1" x 2"

BETWEEN

J-2 & J-1

↓

PX

1" x 2"

BETWEEN

J-2 & J-1

↓

PX

1" x 2"

BETWEEN

J-2 & J-1

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PX

1" x 2"

BETWEEN

J-2 & J-1

↓

PX

12-7-48

PROFILE ALONG S/E SHORE PROPOSED PERM. BRIDGE SITE

0+00 = 2" x 2" HUB @ S/E END OF PERM. BRIDGE

STATION	+	H.I.	-	ELEV	TOP CONC. MON. AT S/E END OF TEMP. BRIDGE
B.M.	4.45	16.29		11.84	
S-433'			3.6	12.7	
S-355'			4.0	12.3	
S-270			4.5	11.8	
S-190'			4.5	11.8	
S-100'			4.4	11.9	
0+00			5.1	11.2	
N-0+08			6.8	9.5	
N-0+26			8.4	5.9	
N-0+40			12.1	4.2	WATER

P.X

12-7-48

76

PROFILE ALONG S/E SHORE TEMP. BRIDGE SITE

0+00 = 2" x 2" HUB @ S/E END OF TEMP. BRIDGE

STATION	+	H.I.	-	ELEV	TOP CONC. MON. AT S/E END OF TEMP. BRIDGE
B.M.	3.94	15.78		11.84	
S-185'			4.2	11.6	
S-110'			4.2	11.6	
S-325'			4.0	11.8	
S-258'			4.5	11.3	
S-190'			4.5	11.3	
S-185'			3.9	11.9	
S-115'			3.9	11.9	
S-70'			4.0	11.8	
S-30'			7.8	11.0	
0+00			5.2	10.6	
N-0+09			6.3	9.5	
N-0+12			9.3	6.5	
N-0+25			11.4	4.4	WATER

(SEE PAGE 74
THIS BOOK)

12-7-98

("M-V")

0+00 = 2" x 2" HUB - RADIUS "M" SECTION E & W ("M-V" LINE)

STATION + H.I. - ELEV

B.M. 4.20 15.65 11.45

W-200' 5.0 10.6

W-130' 5.2 10.9

W-70' 5.5 10.1

0+00 5.0 10.6

E-0+60 5.1 10.5

E-0+75 5.7 9.9

E-1+00 6.6 9.0

E-1+25 9.3 6.3

E-1+50 11.1 4.5

("A-1")

SAME 0+00 & H.I. SECTION N & S ("A-1" LINE)

S-340' 5.0 10.6

S-190' 4.8 10.8

S-100' 5.1 10.5

0+00 5.0 10.6

N-0+65 4.9 10.7

N-0+90 6.0 9.6

N-1+10 8.4 7.2

N-1+29 11.1 4.5

PX
TOP 2" x 2" HUB
RADIUS "V"

12-7-98

("A-0")

0+00 = 2" x 2" HUB AT RADIUS "V" SECTION N & S ("A-0" LINE)

STATION + H.I. - ELEV

B.M. 5.21 16.66 11.45

S-195' 5.1 11.6

S-130' 5.5 11.2

S-70' 5.4 11.3

0+00 5.2 11.5

N-0+15 4.7 12.0

N-0+19 5.9 10.8

N-0+50 6.6 10.1

N-0+90 7.3 9.4

N-1+00 8.9 7.8

N-1+03 10.5 6.2

N-1+12 12.1 4.6

("M-V")

SAME 0+00 & H.I. SECTION E & W ("M-V" LINE)

E-195' 4.2 12.5

E-75 5.1 11.6

0+00 5.2 11.5

W-0+26 4.9 11.8

W-0+35 6.1 10.6

W-0+70 6.7 10.0

W-0+90 7.3 9.4

W-1+00 8.3 8.4

W-1+04 10.8 5.9

W-1+17 12.1 4.6

PX
TOP 2" x 2" HUB
RADIUS "V"

(77)

("A-0")

12-8-48

0+00=2"x2" HUB 440' S/E OF RADIUS "A"

STA	+	H.I.	-	ELEV	TPX
B.M.	2.08	15.96		13.88	TOP PLUG CONC. MON RADIUS "A"
N/W-240'			2.7	13.0	
N/W-110'			3.1	12.9	
N/W-70'			2.9	13.1	
N/W-30'			3.0	13.0	
0+00			5.0	11.0	
S/E-0+30			8.6	7.4	
S/E-0+49			11.5	4.5	WATER
T.P.			3.20	12.76	T.P.#①

("A-1")

0+00=2"x2" HUB 400' S/E OF RADIUS "A"

STA	+	H.I.	-	ELEV	TPX
T.P.	3.85	16.61		12.76	T.P.#①
S/E-0+79			12.3	4.3	
S/E-0+45			8.7	7.9	
0+00			5.0	11.6	
N/W-0+25			3.9	12.7	
N/W-0+50			3.9	12.7	
N/W-1+25			3.8	12.8	
N/W-1+80			3.1	13.5	
N/W-2+10			3.1	13.5	

("A-2")

12-7-48

(78)

0+00=PT. 400' SOUTH OF RADIUS "A"

STA	+	H.I.	-	ELEV	TPX
T.P.	1.24	17.00		12.76	T.P.#①
N-220'			2.2	14.8	
N-170'			2.7	14.3	
N-125			3.5	13.5	
N-0+80			4.3	12.7	
N-55'			4.0	13.0	
N-27			4.1	12.9	
0+00			5.1	11.9	
S-0+30			8.1	8.9	
S-0+50			10.0	7.0	
S-0+70			12.7	4.3	
T.P.			3.56	12.76	T.P.#② 13.44

("A-3")

0+00=PT. 400' S/W OF RADIUS "A"

STA	+	H.I.	-	ELEV	TPX
T.P.	3.82	17.26		12.26	T.P.#②
S/W-0+68			13.2	4.1	
S/W-0+50			10.4	6.4	
S/W-0+38			9.0	8.3	
S/W-0+30			6.7	10.6	
0+00			5.0	12.3	
N/E-45'			4.1	12.9	
N/E-95'			4.2	13.1	
N/E-150'			3.9	13.4	
N/E-210'			3.3	14.0	

(59)

("A-4")

(79)

0+00 = PT. 400' SW RADIUS "A"

STA	+	M.I.	-	ELEV	PX
T.P.	3.48	16.92		13.44	T.P. #②
N/E-250'			3.7	13.2	
N/E-200'			3.4	13.5	
N/E-145'			3.9	13.0	
N/E-65			3.8	13.1	
N/E-35			3.5	13.4	
0+00			5.1	11.8	
S/W-0+30			7.7	9.2	
S/W-0+45			9.9	7.0	
S/W-0+45			10.6	6.3	
S/W-0+65			12.8	4.1	
T.P.			9.65	12.27	T.P. #③

("A-5")

0+00 = PT. 400' W/OF RADIUS "A"

	3.43	15.70		12.27	T.P. #③
W/O+70			11.5	4.2	
W-0+50			9.0	6.7	
0+00			5.0	10.7	
E-40'			3.2	12.5	
E-95'			2.1	13.6	
E-175			2.1	13.6	
E-225			3.1	12.6	
B.M.			1.84	13.86	

CONC MON.
RADIUS
"A"
FL. 13.88

19.30'

7.15'

$$\begin{array}{r} .12620 \\ \underline{} \\ 200 \\ \hline 25,24000 \\ \underline{} \\ 2 \\ \hline 50.178 \end{array}$$

$$\begin{array}{r} 16.92 \\ \underline{4.65} \\ 12.27 \\ \underline{3.13} \\ 15.70 \end{array}$$

$\frac{c}{a}$
 $\frac{a^2}{c^2}$
 $\frac{c}{A}$
 $+B)$

A+B)

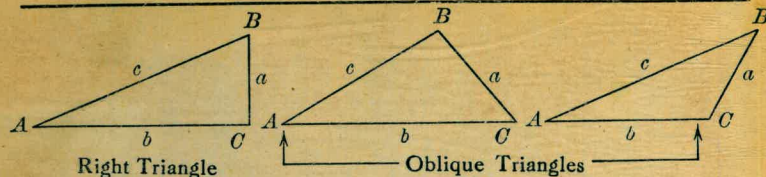
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 9.5 11.8
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 14.5 14.0
 11.0 12.5
 9.0 11.5
 10.4 12.0
 10.0 10.5
 10.0 10.0
 12.0 10.5
 12.5 10.5
 14.7 9.0
 16.0 8.7
 16.3 16.5
 18.0 13.0
 12.0 12.0
 12.4 13.0
 13.4 13.4
 12.7 12.7
 15.0 13.5
 13.7 14.5
 13.0 13.8
 12.0 12.0

11.05
 7.23
 18.28
 6.05
 12.27
 18.28
 6.00
 12.28

TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\operatorname{cosec} = \frac{c}{a}$

Given a, b Required A, B, c

$\tan A = \frac{a}{b} = \cot B, c = \sqrt{a^2 + b^2} = a \sqrt{1 + \frac{b^2}{a^2}}$

Given a, c Required A, B, b

$\sin A = \frac{a}{c} = \cos B, b = \sqrt{(c+a)(c-a)} = c \sqrt{1 - \frac{a^2}{c^2}}$

Given A, a Required B, b, c

$B = 90^\circ - A, b = a \cot A, c = \frac{a}{\sin A}$

Given A, b Required B, a, c

$B = 90^\circ - A, a = b \tan A, c = \frac{b}{\cos A}$

Given A, c Required B, a, b

$B = 90^\circ - A, a = c \sin A, b = c \cos A$

Solution of Oblique Triangles

Given A, B, a Required b, c, C

$b = \frac{a \sin B}{\sin A}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$

Given A, a, b Required B, c, C

$\sin B = \frac{b \sin A}{a}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$

Given a, b, C Required A, B, c

$A + B = 180^\circ - C, \tan \frac{1}{2}(A - B) = \frac{(a - b) \tan \frac{1}{2}(A + B)}{a + b}$

$c = \frac{a \sin C}{\sin A}$

Given a, b, c Required A, B, C

$s = \frac{a + b + c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s - b)(s - c)}{bc}}$

$\sin \frac{1}{2}B = \sqrt{\frac{(s - a)(s - c)}{ac}}, C = 180^\circ - (A + B)$

Given a, b, c Required Area

$s = \frac{a + b + c}{2}, \text{area} = \sqrt{s(s - a)(s - b)(s - c)}$

Given A, b, c Required Area

$\text{area} = \frac{bc \sin A}{2}$

Given A, B, C, a Required Area

$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = $5^\circ 10'$. From Table, Page IX, $\cos 5^\circ 10' = .9959$. Horizontal distance = $319.4 \times .9959 = 318.09$ ft.

Horizontal distance also = Slope distance minus slope distance times (1 - cosine of vertical angle). With the same figures as in the preceding example, the following result is obtained. $\cos 5^\circ 10' = .9959$. $1 - .9959 = .0041$. $319.4 \times .0041 = 1.31$. $319.4 - 1.31 = 318.09$ ft.

When the rise is known, the horizontal distance is approximately: - the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance = $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.